A soldierly perspective on trust

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A Study into Trust within the Royal Netherlands Army

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The cover photo shows the re-enactment of the Three Island Crossing by colonists across the Snake River near Glenns Ferry, Idaho. Crossing the Snake River, which has a strong current, demanded a great deal of trust, not only upon the colonists among themselves but also between colonists and Indians, as the latter guided them through the ford. The photo symbolizes trust under circumstances of life-threatening risk.

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A Soldierly Perspective on Trust

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Irene Ellen van der Kloet,

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te Deventer

Promotores:

Prof. Dr. K. Sanders

Prof. Dr. J. Soeters

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Preface

Why did I write a dissertation about trust within the military?

In 1978 I joined the army. I had wanted to go to the military academy, but as women were not yet admitted to the military academy[1], I joined the women's army corps. Only later did I learn that a few women had been admitted to the academy a month before I had joined the women's army corps. I must say now that at that time this did not contribute to my trust in what the army told me. When I asked my commander when I could go to the academy, she told me that "it was too early to tell", so I, a bit naïve and patient (I was only 19 years old) gave it another year. In September 1979 I heard that more women had been admitted to the academy and my trust in what they told me in the army, the institution I had chosen to make a career in, was suffering.

In 1980 I joined the intelligence service where I learned the Russian language, to be an interrogator. I was also taught never to trust anyone to his word. I did not want to work in a distrustful environment all my life, so after a few years I went to an infantry battalion as a personnel officer. In an infantry battalion, servicemen work and live like one big family: they go on field exercises together, they train and they practically live together. I had a great time there, also because I found out that I could trust my colleagues. Some of the people I met there have become life long friends. Why I trusted them? They were honest to me, they followed up on what they told me. They also told me things they would not easily tell others, which made me feel needed. They exposed a general interest in me, not so much as a woman but as a valued colleague. This is valuable, as being a woman in the infantry was (and still is) an exception: the infantry is a men's world.

I found out how valuable this was when I became a company commander in a different infantry battalion. Here, the general attitude was one like "we do not want you here because you are a woman". They gave me the feeling they did not trust me. I dare say now that I often felt hopeless and lost, where to start if much of what you do is explained in the wrong direction? Nevertheless, one thing I learned from my father is never to let them get the better of me and never to give up, which was what I did, and eventually it saved me. No matter what happened, be it that things beyond my control went wrong (the deputy battalion commander had a habit of finding fault with most of what I did, whether I could help it or not) or small

[1] The Air Force admitted its first woman that year, straight from school, and the army admitted a few women who had already served in the women's army corps.

things went wrong, I held up my head high and tried to do better next time. I told my staff openly and honestly that I may not be as competent as expected but that I had the intention to make the best of it and that I expected them to assist me. After a year one of the battalion's clergymen told me that my personnel stood behind me in what I did. That felt good. Apparently, they had some degree of trust in me and from what I know now, I guess it must have been that I had been honest and benevolent towards them, in the mean time working on my competence and predictability. One might say that I have very different experiences with trust within the military, some good, some not so good.

Then how does one get from a company commander in the infantry to a dissertation on trust? I started studying sociology in 1995 and when I graduated from university proceeded to a dissertation. As the subject of my final study at university was trust, I took up this subject as a dissertation subject as it was intriguing to me. I had encountered numerous situations in which trust seemed absent, or in which trust was high and I wanted to know how trust functions within the army.

A dissertation is an individual project, but it cannot be done alone. There are many people I should thank for their support. First of all Karin Sanders and Wijbrandt van Schuur, who initially encouraged me to start with it, without their enthusiasm I probably would not even have considered it. Also, Joseph Soeters who made a great contribution with his wide research experience in the armed forces. Especially in the first years I had to work mostly in my own time, and I thank John Terpstra for his generosity to give me one day a week "during the boss's time" to work on this book. In general, the facilities provided by the Royal Netherlands Army have been very generous throughout the process of writing this book. I greatly appreciate René Moelker, not only because he is good colleague, but also because he is a man of bright ideas who gave me a great leap forward with this book. A dissertation requires many background studies, and I thank Coen Terpstra and his crew of the library at the military academy to always assist me in finding books and papers. As for the cover, I thank Rop Willems for his creative design. Hennie Rozengarden deserves my thanks for rescuing my computer several times from breaking down.

This book was written in English, but as I am not a native speaker, my texts needed to be corrected before I had the heart to have them published. I thank Dirk-Jan Smit, Jurgen Gruson and Harry Kirkels for correcting all my awkward English.

Two individuals are special in my life. The first is my partner Hans. Hans has always supported me, he would cheer me up when I was down and help me where he could, drawing

from his personal experience with writing a Ph.D. I am deeply grateful to him for that. The second individual lives in a stable. She gives me many hours of joy and as being such a reliable friend and companion, she made it possible for me think over in the afternoon, when gently being rocked back and forth on her back, what I had written down earlier that day. Yes, some of the better ideas arose on horseback, thank you very much, Kiona.

I will not mention my friends and colleagues who have supported me, as I am afraid if I mentioned names, I would forget one or two. So herewith, I thank everyone for his or her support.

Ulvenhout, September 2004

Introduction

Although most people may not always be aware of it, trust forms an essential part of human existence. People will make assumptions about how other people react to them, but as one cannot be totally certain how others interpret the world around them, other people can also be a source of insecurity. With many people around, the world could become a complex place and the need to reduce this complexity and uncertainty arises.

According to Luhmann (1979), people reduce uncertainty about others by assuming that other people's actions will not be detrimental to their own well being, though a certain amount of uncertainty will remain. The assumption that other people's actions will not harm one's own interests, and the uncertainty connected with this assumption, forms the beginning of trust (Luhmann, 1979).

By trusting, the decision is taken that another person will not harm one's valued goods, although one is well aware that the other person has the possibility to do so: there is no certainty, as the reduction of risk is an assumption. In fact, the actual risk may not decrease. However, under risky circumstances a trusting person may be willing to take part in actions he[2] might not undertake in the absence of trust. Hence, the well being of one's valued goods comes to depend on the trusted person (e.g. Luhmann, 1979; Baier, 1986; Lane, 1998, Sztompka, 1999). What those valued goods are can differ: they may be material goods, but could also be one's health, or one's life that is at stake.

Trust is present in everyday life, and this is no exception in the workplace. In many workplaces, people depend on each other for good organizational results. This interdependence demands co-operation, where the success of each worker depends on the willingness of others to do their work. This incorporates a risk and uncertainty. Trust is needed to enable co-operation under these circumstances of risk and uncertainty (Sztompka, 1999), as in the total absence of trust, conditions would have to be made up in a contract in order to protect oneself against unwanted behavior from fellow workers. This way, co-operation would not arise or only with great difficulty.

Particularly in a workplace where people do work that may endanger their lives, think for example of the fire brigade, the police or the army, this connection between trust and co-operation becomes extremely salient: employees depend on each other, and non-co-operation

[2] Throughout the book the male form is used, however what is said in the book refers to men and women.

between employees may cost lives. In this book, trust at the workplace, the army to be more specific, is the central topic.

There are various reasons why trust in the workplace is a relevant subject. Firstly, in the workplace, interdependence demands that people need to co-operate with each other to accomplish their tasks, but other people's activities cannot always be controlled (Luhmann, 1979; McAllister, 1995; Sheppard & Tuchinsky,1996; Sztompka, 1999; Dirks & Ferrin, 2001). In this interdependence, one risks that a fellow employee may not perform as expected and could harms one's own actions, but control of someone else's actions is a costly and time-consuming activity that is virtually impossible to maintain (Miller, 2001; Yukl, 2002). Hence, in order to start co-operation trust is needed (Mayer, Davis & Schoorman, 1995).

Secondly, many organizations are becoming flatter nowadays (Lucas, 1996). The number of management layers is reduced and with delegating authority, organizations more and more depend on the workers' initiatives. Where supervision by managers recedes, trust by those managers in their subordinates is bound to take its place. It is here that often a problem is found as organizations reduce their management layers but maintain their "old" coercive nature (Adler & Borys, 1996; Adler, Goldoftas & Levine, 1999). Hence, workers get the impression that they are not trusted because the organization keeps issuing coercive orders, on the other hand they are expected to work quite independently and be resilient in the 'new' organizational culture. Also, less managerial supervision calls for trust among employees as they need to deploy their own initiatives for co-operation rather than depend on what they are being told to do (Lucas, 1996; Kramer & Tyler, 1996). This co-operation needs trust as not every activity by a colleague can be monitored or controlled. Moreover, complexity of tasks also makes it more difficult to monitor co-workers' tasks (Hardin, 2002). Once there is trust, opportunities arise to extend the co-operation as there is willingness towards each other to co-operate (Dirks & Ferrin, 2001; Williams, 2001; Tyler, 2001).

In the third place, organizational settings could be thought of in which it is physically impossible for a manager to monitor employees' actions. Take for example such instances where employees do their job out of eyesight of supervisory levels, at a geographical distance not easily bridged. Whereas it is difficult to monitor employees' activities because of fewer organizational levels and less hierarchy, it will be even harder, if not physically impossible to monitor their actions when they are geographically distanced. Here, managerial trust in employees is necessary, simply because management has no choice.

Last but not least, in organizations where the risks are high, the need for trust becomes more relevant. Within the army, where people are placed in risky situations, supervisors cannot always have control over the actions of their colleagues, however they need their colleagues to accomplish a mission. The decision to complete an assignment is only possible if trust is placed in those who are also part of that mission (Coleman, 1990).

Risks in organizations may differ. Much literature can be found about trust within and between organizations (e.g. Cook & Wall, 1980; Boon & Holmes, 1991; Fukuyama, 1995; Mayer, Davis & Schoorman, 1995; Mc Allister, 1995; Kramer & Tyler, 1996; Lane & Bachmann, 1998; McKnight, Cummings & Chervany, 1998; Costa, 2000; Dirks & Ferrin, 2001). Often a connection is made between trust and risk, still empirical studies about trust within organizations that traditionally work in high risk environments are rarely found. Although risk is so obviously connected with trust (e.g. Luhmann, 1979; Coleman, 1990; Boon & Holmes, 1991; Lewicki & Benedict Bunker, 1996; Lagerspetz, 1998; Lane, 1998; Sztompka, 1999), this is quite surprising. Coleman (1990) in this light discusses the role of trust within an army, stressing that trust is necessary as not every actor can fully observe the actions of others. Paparone (2002) discusses the nature of soldierly trust, thereby referring to the possibility of more freedom of action for organizational members under conditions of trust, which in turn encourages innovation and professionalism. But these are feeble results in the quest for the connection between trust, risk and co-operation in high risk organizations.

Concluding, co-operation and increased interdependence as well as changes in organizational settings, such as situations with higher risks than usual, might require a more prominent place for trust. The central research problem in this book is to examine and explain trust within the Royal Netherlands Army. The central research question is:

How can the development of trust among servicemen in the various stages of their longer lasting mutual relationship be explained?

What is trust?

This study refers to trust in co-workers in the organization and trust in leaders in the organization. Trust has been defined by using a model about initial trust formation in new organizational settings by McKnight, Cummings and Chervany (1998). As trust in this study does not particularly pertain to initial trust formation, not all elements as mentioned by

McKnight et al. have been included in the study. Below, a description is given of those elements that pertain to trust as used in this study.

Disposition to trust. An individual learns from early childhood what to expect from his social context, like in situations in which positive actions are desired from other people because one is in need or because a future situation may demand it. The extent to which expectations are met lays the foundation for developing a trusting orientation. This trusting orientation, also called disposition to trust, forms the basis for further trust development in others. Hence, it can be considered as an antecedent of trust, rooted in a person's character (Rotter, 1991; Boon & Holmes, 1991; Mayer, Davis & Schoorman, 1995; Couch & Jones, 1997; McKnight, Cummings & Chervany, 1998; Costa, 2000).

Rule maintenance. Organizations create safeguards against untrustworthy behavior by imposing rules on employees to attain organizational goals, but also to display transparency in organizational management towards employees. Employees are expected to follow these rules. Provided that an organization is consistent in its retribution if rules are broken, the organization displays trustworthy behavior and thus provides a safety net for employees if one breaks rules in violation of another's interest (see for instance Baron & Kreps, 1999), irrespective of the fact whether that other party is the organization or another employee. As such, employees are kept from displaying unwanted or unexpected behavior in favor of wanted and expected behavior and employees learn that rules should not be broken (e.g., Fukuyama, 1995; Horgan & Muhlau, 1998). The leaders in the organization are expected to take decisions in accordance with these organizational rules. Leaders may sometimes be required to bend the rules a little to attain organizational goals (Adler & Borys, 1996; Adler, Goldoftas & Levine, 1999; Soeters, Winslow & Weibull, 2003). An enabling organization, in which this rule bending is accepted, is likely to invoke leaders' trust in the organization, as they know their actions will be appreciated. In a coercive organization this rule bending may not be appreciated, and leaders' trust will not easily arise.

Disposition to trust and maintenance of rules are expected to precede trust formation and thus are called antecedents of trust. Trust in itself may be assesseded by four elements that will be discussed below, and are called components of trust (Mayer, Davis & Schoorman, 1995; McKnight, Cummings & Chervany, 1998).

Competence belief. Competence belief concerns the belief in a person's abilities for a task (Cook & Wall, 1980; Butler, 1991; McAllister, 1995; Mishra, 1996; Lane, 1998). It is task-specific and involves a certain skill, trade or profession and is therefore also specific for a person. A person

may be competent at, for example, repairing computers, but this does not imply that he can maintain a garden as well. Hence, trusting someone with one set of valued goods does not imply that this person can be trusted with another set of valued goods. Trust depends on what one believes the person is capable of handling. This demands thinking about what to entrust someone with, and as such entails a cognitive choice, a rational belief that a trustee has the capacities necessary.

Predictability belief. In his standard work on trust and power, Luhmann (1979) mentions reduction of uncertainty as a precondition of trust. Some certainty can be derived from previous interaction with the trustee, in which his reactions to different situations are assessed. Hence, a trustor may be able to predict a trustee's behavior to some extent and the risk involved in trusting this person. Being able to predict another person's actions may go a positive or a negative way. A person may be known to act in favor of other persons, but a person may also be known to act in his own interests against a trustor's interests. By the ability to predict a trustee's behavior, the trustor can assess if his own interests will be violated if he entrusts the trustee with valued goods. The trustor's conclusion may be that the trustee does indeed act in favor of the trustor, but the trustee may also often act in violation of the trustor's interests. In the former case, the trustor may trust the trustee, but in the latter case the trustor will not trust the trustee, whereas in both cases the trustee is predictable to some extent.

Honesty belief. Honesty refers to saying what one stands for and following up on agreements (Butler, 1991; Mayer et al., 1995). Moral standards come to surface here. An honest person does not lie or cheat, or steal (Fukuyama, 1995; Lagerspetz, 1998). If a trustor believes a person to be honest, the trustor has positive expectations about the trustee and will believe him to communicate openly, and behave according to generally accepted moral standards within the organization. Honesty belief incorporates an attitude on the part of the trustee to be truthful towards the trustor and is thought to be indispensable for trusting another person. A trustor who gets the impression that the possible trustee is truthful in what he says and does is likely to trust that person because he seems honest. The opposite may also occur. The reader will recognize the feeling that one cannot lay a finger on another person's behavior but have the feeling that the other person has a hidden agenda, or is not truthful. In such cases, this person will be thought of as not being honest, even though the monitored behavior does not give reason to think so.

Benevolence belief. Benevolence refers to a person's voluntary positive intentions towards others, where no egocentric intentions are involved (Baier, 1986; Boon & Holmes, 1991; Mayer, Davis

& Schoorman, 1995; Dirks & Ferrin, 2001). If a possible trustor sees that a trustee shows the intention to do well to the trustor's interest it is likely that the trustor may ask the trustee to look after the trustor's valued goods. For example, if the trustor lends a car to the trustee, benevolence belief implies that the trustor thinks that the trustee will treat the car well, not bump it into a wall because of carelessness, and will return it as it was given to him. Benevolence belief incorporates a sense of assumed altruistic behavior on the part of the trustee. The trustee does not have a personal interest in acting benevolently towards the trustor, but does it because he is willing to do good.

The four aspects are related. A trustee's competent and predictable behavior can be regarded as cognitive aspects of trust. It is a rational decision to decide if a trustee is competent and predictable, as this can be derived from previous monitored behavior. On the other hand, honesty and benevolence cannot be so easily assessed in a cognitive way. Of course, honesty and benevolence can be derived from behavior in the past, but these aspects also often include a "gut feeling" about a trustee's behavior and are therefore referred to as emotional elements. Again, the example of the hidden agenda is mentioned: one may actually see how a person acts in accordance with what he says, but still have the feeling that the person has a second agenda. This is obviously an emotional aspect.

The cognitive aspects should be coupled with favorable or harmless intentions. Not doing so would give the possibility that a trustee is capable of caring for a set of valued goods and predictable in his actions, but that does not imply that this person will look after the valued goods quite well, or be truthful in telling what happened to it. Take for instance the earlier mentioned example of the car. A trustee may be a good driver and be known to return the car on time, but he may have left the interior of the car a mess, or lie about the contents of the gas tank. This boils down to the fact that competence and predictability should be connected with honesty and benevolence. To take only honesty belief or benevolence belief for assessing trust, without competence belief or predictability belief, is not sufficient either. For example, benevolent behavior alone does not show proof of the trustee's capabilities of not harming the trustor's interests. Moreover, the trustee may have good intentions now, but if in similar situations he behaves as expected one time, and in an unexpected manner at another, this will not lead to a trusting belief with a trustor. Hence, competence belief, predictability belief, honesty belief and benevolence belief cannot be seen separately from one another. Interpersonal trust can thus be considered as a container notion, as not one but four elements are involved.

Four studies on trust

Trust will be addressed from various points of view. First of all it is essential to examine how trust between servicemen is assessed. Only after that has been done, a follow-up can be made upon trust in longer lasting relationships and the explanation of it. This means looking into the aspects servicemen consider when it comes to trust, but also looking into their disposition to trust. Moreover, the organizational context may play an important part in their trust assessment in the sense of rule maintenance. That is the reason why the first study addresses components of trust. The study addresses how soldiers assess their interpersonal trust, and what precedes trust. The main question in this study is:

How can trust among soldiers in the Royal Netherlands Army be assessed, and how can it be explained?

After defining components of trust, the question is how trust develops over time, as the central question mentions a longer lasting relationship. Does the order in which the components of trust appear change, or does it remain the same? What is the role of antecedents of trust over a longer period of time? To get a better insight into the longer lasting relationship among servicemen, six units have been followed throughout their deployment abroad. The central question in this study is:

How does trust develop over a six-month mission, and how can this development be explained?

In a hierarchic organization, leadership is the spine. Leaders give the direction the organization is going into and followers, as the word says, are supposed to follow. Followers, such as employees in an organization (servicemen in an army) must follow but their willingness to follow also depends on their trust in their leader (Gabriel and Savage, 1978). A decrease or lack of willingness is not likely to end up in smooth co-operation in the future, and may eventually lead to a failed operation, which may result in a further decrease in willingness to follow that leader or eventually a refusal to do so. In an army, this may cost lives. Since leadership seems so essential (see, among others, Hunt & Phillips, 1991, and Yukl, 2002), two studies address the role of leadership in trust formation. The first study addresses leadership under dangerous circumstances. The main question in this study is:

Is there a connection between potential risks, leadership style and subordinates' trust and how can this connection be explained?

Trust in leadership also pertains to trust in superior levels in the organization, the highest ranked staff, where decisions are taken that influence all organizational members. An organization develops rules and procedures and writes them down into what is called management (see also Hersey & Blanchard, 1977). The purpose of management is in general to achieve effectiveness and efficiency, and also to make sure that everyone follows the same procedures. Management decisions drop down into the organization through various hierarchic layers. If employees at any level within the organization do not trust the organizational rules and procedures, or more broadly speaking, the way the organization is run, they are likely to find different ways to attain their goals than by the rules prescribed. The fourth study refers to the peacetime situation where units within the RNLA need to work according to the rules of management. The way commanders feel about management is examined, as well as their trust in their immediate superior level and the extent to which they follow rules. As communication is likely to be of influence, this is included in the study as well. The central research question in this study is:

How do organizational management and compliance with organizational rules influence trust in higher levels within the organization and what is the role of communication in this connection?

These four studies have been done over the course of four years. The research questions as mentioned above will be examined in the consecutive chapters of this book.

The Royal Netherlands Army

This section will deal with the RNLA to give the reader some insight into this organization.

The RNLA faced heavy storms in the past 15 years. In 1989, when the East Bloc fell apart, the RNLA's original task of defense in the east under NATO flag was no longer necessary. The nation's security remained important, but apart from that, other military activities became salient (*Landmacht Doctrine Publicatie-I Militaire Doctrine,* 1996). In this view one should think of humanitarian assistance throughout the world, help in the case of natural disasters, peace-keeping and peace-building operations[3]. To participate in such operations, the army needed to

[3] These operations are called Military Operations Other Than War (MOOTW). The NATO definition of MOOTW differs from the RNLA definition of MOOTW: NATO regards any non-combat operation in which military means are used for other than large scale combat as MOOTW, which includes counter-terrorism, counter-drugs and counter-guerrilla operations. In the RNLA definition, counter-terrorism and counter-guerrilla operations are seen as combat operations (*Landmachtdoctrinepublicatie III*, 1999).

be reduced and restructured, restructuring and reductions that have taken place since 1990 because of the changed assignments and due to financial cutbacks. The aim was a more efficient and more effective army. This has resulted in an all-volunteer army with new equipment, different training than before, and many servicemen being deployed. As it is today, many servicemen are operating abroad. For military operations other than war, one should think of peacekeeping in Cyprus, humanitarian aid and peacekeeping in former Yugoslavia, mine clearing in Mozambique and Angola, to mention a few. National tasks are operations that take place on the national territory (for instance assisting the police in controlling animal transport during the foot-and-mouth disease outbreak in 2001).

Another important change that has taken place in the RNLA is the abandonment of conscription. As of 1995, the RNLA became an all-volunteer army. Young men and women are now recruited from civil society and as an employer, the RNLA must compete with other organizations in recruiting young people for vacancies, and must have something special to offer in order to attract applicants. The RNLA offers training, pay throughout training and work in the army, study facilities and adventure (deployment abroad).

Along with the changes in missions and structure the army went through, it pays increasing attention to the human aspect in being a serviceman. Servicemen are surrounded with care when they are being sent on a mission. They get stress prevention training and learn what to do after they have been through a stressful experience. Among aspects for the human being behind the servicemen, a place has been found for trust. The RNLA expects flexibility, initiative and commitment from its personnel. Constant monitoring of its personnel is bound to have a negative effect on personnel, it will loose initiative and commitment to its job properly. It is because of this particular initiative and commitment and the idea that all personnel should value the organizational targets, that trust is seen as an increasingly important factor for organizational functioning (*Handboek Leidinggeven in de KL*, 2002).

Units that are sent on a mission are basically existing units. However, not all positions required in the area of operations are originally present in a unit, which means that many servicemen are added from various units to the unit about to be deployed. Sometimes servicemen from as many as fifty other units are added to a deployed unit. Where the servicemen from the original unit know each other, the newcomers need to acclimatize in the unit and get to know their colleagues with whom they will serve in the area of operations for the next four to six months. They go through training prior to deployment, in which sometimes not all servicemen assigned for the mission participate, thus mutual trust does not

always get a chance to be built up prior to deployment. Still, in order to accomplish the mission well, trust seems necessary.

When in the Netherlands, in a peacetime environment, units train, maintain their equipment and often find themselves in the barracks. But it is not only operational units that are part of the army, there are also many training centers and personnel at various levels in the organization. Their main duty is to prepare servicemen for their jobs or support the operational units. There are many procedures and rules that serve as guidelines for this support. Some rules have been developed by the army itself, others have been derived from civilian law. Rules derived from civil law are, for example, the law on HACCP[4], the law on working conditions and the laws concerning the preservation of the environment. Although staff as such hardly operate in crisis areas, smooth co-operation, with in its slipstream trust, is essential for this staff as well.

The RNLA is also a hierarchic organization, especially when seen from the outside: formally, it is a highly hierarchic and bureaucratic organization. A replacement for trust, like control, could easily be applied, as it seems. However, subordinates who do not trust each other will not share information or co-operate, and a commander is not likely to delegate authority to subordinates who do not trust each other (Yukl, 2002). Due to a high level of interdependence in the workplace, both in the Netherlands and abroad, trust within the RNLA is necessary between leaders and subordinates, among subordinates and within the organization as a whole.

What are the situations commanders and subordinates may find themselves in? A commander is the linking pin into the higher levels of command. Commanders from battalion level and higher have a staff or group of people for personnel matters, security and intelligence, operations and training, logistics, communication and civil military co-operation. The staff members advise the commander, but they also often take a decision or issue orders to lower command levels on the commander's behalf, as they have the authority to do so.

Units can be placed under a different command than their initial organizational command. For example, an air mobile unit, usually under the command of the Air Mobile Brigade, can be assigned to the staff of National Command in the case of, for example, an outbreak of a contagious animal disease, such as foot and mouth disease (2001) and fowl pest (2003). Units are then assigned to set up checkpoints on roads to prevent animal transportation, to prevent

[4] Hazard Analysis Critical Control Points, a law that looks after the hygiene, for example as maintained in preparing

spreading of the disease. Although this is not the first main task of the RNLA, it is one of its tasks.

In all these cases, co-operation is necessary, with other servicemen, civilians or people from other nationalities, even in other countries. This all boils down to the fact that the serviceman who is posted in one unit today, can be assigned to another unit for a specific task tomorrow, or be sent on a mission, or be posted in another unit for a next term of three years. Hence, trust is an issue within the army, and the importance of the trust relation between commanders and their subordinates and among soldiers is emphasized (*Handboek Leidinggeven in de KL*, 2002), but one can question if this is enough. Servicemen, being sent on missions abroad, find themselves in situations of high risk. Since the end of the Cold War, Dutch servicemen have participated in missions in Bosnia (since 1992), Kosovo (1999), Afghanistan (since 2002) and Iraq (since 2004) (Klep & Van Gils, 2000). All these operations contained a relatively high to very high level of risk. Mutual dependency and co-operation were highly at stake in these operations. Nevertheless, an extensive study into the role of trust within the army as a high-risk organization has so far not been done. This study intends to fill a part of this gap.

Method

The method used in this research is mainly surveys. These surveys have either been handed out personally or sent by surface mail.

For the two studies on components of trust and development of trust the surveys were added to surveys on morale[5] that were handed out to field units. The surveys were either handed out by the researcher personally, and collected afterwards, or sent to the units, handed out by the commanders, collected and sent back to the researcher. For the study on the effect of leadership style on subordinates, through a network of friends some units were found willing to participate in the study. These surveys were handed out personally and collected by the researcher. The commander in chief of the RNLA ordered a study into compliance with rules, to be done by the researcher. In this study, other subjects were added such as communication, consideration and trust. Through random sampling in a list of all commanders

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food.

within the RNLA the respondents for this study were found. These surveys were sent by surface mail. In all cases random sampling was used.

Surveys need background information, they need some study in advance, and with the background of being a servicewoman it was not difficult to get access to many publications about the RNLA. Some interviews have been done for the study into the development of trust and for trust and management. Background information for the missions abroad was needed to get a general impression on what had happened during the missions. If severe incidents had occurred, this might have influenced mutual trust. No incidents were found that could account for severe changes in trust, but still the interviews gave an impression of how the situation was in the deployment area. For the study into trust and management some background information was acquired in advance to get a general idea what to ask in the survey.

Many questions in the surveys were derived from existing questionnaires, but sometimes questions were made up because no existing applicable questions could be found in existing questionnaires. The latter also applies to the open questions, that are primarily applicable to the military situation. There are not many surveys in the literature about military personnel, but often, existing surveys from civilian studies were translated and modified to the military situation.

Various scaling analyses were applied. Often, a Mokken Scale Procedure (MSP: Mokken, 1971) was used, as this has not often been used in studies before. In many studies, reliability or factor analysis is used. Mokken Scale analysis differs from reliability analysis, as in MSP a scale is built up from one item to as many that will fit into the scale. The procedure of Mokken Scale analysis closely resembles a Guttman scale, and is built on this principle. Reliability analysis works the other way around, here a scale is given and is indicated which item should be deleted from the scale in order to get a better scale. If an item is deleted, a better (more reliable) scale is given. Both procedures are good, but reliability analysis is much wider used than Mokken scale analysis. But not only Mokken scale analysis is used, reliability analysis is used as well, in addition to factor analysis, though the latter has only been used once.

Various analysis procedures were used, but most of all the program SPSS (Statistical Package for the Social Sciences) has been used to analyze the data. In chapter three Multilevel Analysis for Windows (MLWin) has been used, as two nested organizational levels are subject of this study. Multilevel analysis is used when nested sources of variability are analyzed, such as

[5] Morale studies are done among units prior to, during and after deployment.

students in classes, employees in firms, soldiers in platoons. The variability of each level of analysis is taken into account in multilevel analysis; there is variability between students within classes, but also between classes. When one of these types of variability is ignored, the wrong conclusions can be drawn. Basically, a multilevel analysis as used in this book is much like a regression analysis, with the random effects at each level of analysis taken into account.

Outline of the book

The book reports on the emergence and development of trust within an organization that is built to operate in an environment of high risk and uncertainties. The book is made up of four studies, laid out in chapters. Each chapter is a separate study in itself. Some of the studies discussed in the chapters have been published as articles or are under review for publication. It is therefore not surprising if the reader has read one of the chapters elsewhere. Moreover, as each chapter contains a separate study, overlaps between theory discussion are likely. The discussion on trust as found in one of the previous paragraphs can also be found in the chapters, but it was given in this introductory part to give the reader some idea about what to expect.

Chapter one starts with the components and antecedents of trust among servicemen. In chapter two, the results of the study in chapter one are elaborated upon in examining the development of trust among servicemen on a deployment mission. Chapters one and two contain notions about trust at the interpersonal level, among colleagues.

Chapter three deals with trust in the immediate superior leader, where a situation of risk is incorporated in the model. Chapter four deals with commanders' trust in leaders at higher organizational levels.

The chapters are followed by discussion, conclusion and recommendations, limitations and avenues for further research.

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Chapter 1. Assessing Interpersonal Trust within an Organization[6]

1. Introduction

In recent years organizations have changed from hierarchical structures into flatter, decentralized organizations with a closer focus on networking and personal contacts (Wickens, 1995). Formal organizational change often involves changes in the informal organizational social order, which then calls for more personal interaction. Social relationships evolving from this interaction create a need for trust, especially in situations in which co-operation may put parties at risk (Lewis & Weigert, 1985; Mayer, Davis & Schoorman, 1995; Luhmann, 2000). An individual that engages in a trusting action must take the risk that either positive or negative outcomes may occur, this is likely to be reduced by perceived or assumed behavior of the trusted party (Cook & Wall, 1980; Coleman, 1990; Mayer, Davis & Schoorman, 1995; McKnight, Cummings & Chervany, 1998; Rousseau, Sitkin, Burt & Camerer, 1998). Trust is not essential for co-operation as long as there is no risk involved in it (Mayer, Davis & Schoorman, 1995; Luhmann, 2000), but it cannot exist without risk: if there were no risk, trust would be unnecessary (Lagerspetz, 1998; Luhmann, 2000). Trust is thus essential when people co-operate in risky operations under life-threatening circumstances. For that matter, trust is especially important in organizations such as the fire brigade, the police and the armed forces.

In this chapter the focus lies on trust within one such organization, the Royal Netherlands Army (RNLA) (but the purport of this study can apply to any organization). Soldiers need to co-operate, a co-operation which may involve risk, and it is this that makes trust so essential for soldiers. After all, when it comes down to it they may have to entrust each other with what is their most precious good: their lives.

A large reorganization has taken place in the past fourteen years within the RNLA. After the collapse of the Warsaw Pact in 1989, the tasks of the Dutch armed forces significantly changed from general defense against a Warsaw Pact attack to participation in peacekeeping, peace-enforcing and humanitarian operations all over the world. The conscription phased out in 1995 and a force reduction from more than 80.000 to 23.000 troops

[6] The authors of this chapter are Irene E. van der Kloet, Karin Sanders and Wijbrandt H. van Schuur. This chapter has been submitted as an article to the journal Human Relations.

was carried out (Van der List, 2002). These changes were accompanied by a different command structure. The RNLA had always maintained a strictly hierarchical command structure, but operations by smaller units in remote areas call for a command structure which allows military personnel in the field to make the final decision about what to do, judging by the situation. This "mission-oriented command" structure puts quite some responsibility on the shoulders of army personnel at lower levels, who carry out their tasks in a relatively independent manner, walking or riding patrols in deployment areas and reporting on incidents. Where superior commanders, sometimes located many miles away (from their subordinate commanders), need to rely upon their subordinate commanders, the latter commanders, in their turn, need to rely on their personnel in the field for the latest update of information: a close monitoring of personnel is hardly possible as they operate beyond the commanders' scope. As these situations incorporate close co-operation, trust is involved: between commanders at the different levels, between commanders and their personnel, and among soldiers.

The change in the soldiering tasks, which often brings military personnel into contact with civilians, local workers, or other people outside the RNLA, necessitated a guideline for behavior (e.g., see Paparone, 2002). A Code of Ethics (in Dutch *"Gedragscode"*[7]) was introduced in 1996 from the point of view that soldiers deal with civilians during peacekeeping or humanitarian operations or national crises like foot and mouth disease (Van Iersel & Baarda, 2002). The Code reflects four components of trust that are considered its main elements: competence belief, predictability belief, benevolence belief and honesty belief (e.g. Lewis & Weigert, 1985; Boon & Holmes, 1991; McAllister, 1995; McKnight, Cummings & Chervany, 1998). Rule number six concerns equal treatment of all people and respect for human rights. Moreover, rendering assistance to those in need, if possible, is an element of this rule. The rule clearly reflects two components of trust: honesty and benevolence. The former is found in the statement that all people will be treated equally. Treating people differently from others in the same group is discrimination, and dishonest towards those from whom assistance is withheld. Rendering assistance to people in need reflects benevolence: a soldier in a deployment area who comes across an injured civilian is expected to help without orders from above.

Rule number seven requires soldiers to complete their tasks professionally, even under difficult circumstances or in life-threatening situations. In order to do this, they must be competent at

[7] See Appendix A.

their task. Rule number eight says that every soldier can count on his fellow servicemen to be determined and tenacious. If this is so under all circumstances, so this soldier may be assumed to be predictable in his actions, provided that, in compliance with rule number seven, he has maintained his competence.

Rule number three emphasizes team members' responsibility towards each other, and their need to contribute to the team's performance. If they trust each other, this will be easier to accomplish.

The Code serves as a guideline for behavior that is best described by the definition of Gaumnitz and Lere (2002) for ethics: "... A framework for human conduct that relates to moral principles and attempts to distinguish right from wrong", but it also emphasizes how soldiers need each other. This is especially applicable in a deployment area, where there is no one else to turn to but one's mates. The lack of alternatives calls for the need for trust (Coleman, 1990). Although the Code is incorporated in army training and in army life, the way in which the Code was introduced has made its acceptance rather difficult (Van Iersel & Baarda, 2002), so the assurance that soldiers do live up to the Code is still a matter of trust, involving the element of risk (Lagerspetz, 1998).

Trust incorporates cognitive and emotional aspects (e.g. Lewis & Weigert, 1985; Mc Allister, 1995) and influences task-related behavior (Dirks & Ferrin, 2001), which makes it so essential to identify its antecedents and components. Antecedents are elements that precede the formation of interpersonal trust. As antecedents, or preconditions for trust formation, previous studies have yielded a general attitude that others can be trusted (e.g. Rotter, 1991; Couch & Jones, 1997; Costa, 2000) and institutional arrangements, like maintenance of rules (Lewis & Weigert, 1985; Fukuyama, 1995; Horgan & Muhlau, 1998; Paparone, 2002).

Disposition to trust entails the general assumption that another person can or cannot be trusted. It is believed to be formed from early childhood and precedes general beliefs about another person's actual trustworthiness (e.g. Luhmann, 1979; Lagerspetz, 1998; Costa, 2000). As such, disposition to trust is part of an individual's personality.

For a real indication that someone can be trusted, knowledge about the other person's actual behavior is indispensable. Beliefs are formed about the other person concerning his competence, predictability, honesty and benevolence. Positive beliefs about these four components express trust (Mayer, Davis & Schoorman, 1995; McKnight, Cummings & Chervany, 1998). But trust is a sensitive subject and measuring trust directly is likely to yield socially desirable results. Therefore, an indirect way of measuring interpersonal trust is

proposed by measuring competence belief, predictability belief, honesty belief and benevolence belief. Although these components can be subject to social desirability too, at least no direct questions about trust are asked. Therefore, an indirect way to discover interpersonal trust is more likely to yield reliable results. The studies by Mayer et al. and by McKnight et al. strongly point in the direction of these beliefs as components of trust, and as far as could be ascertained, they have not previously been empirically tested.

What distinguishes a component from an antecedent is, that the latter can be present without a person having formed actual beliefs about another's competence, predictability, honesty and benevolence. A component is formed after beliefs about another's competence, predictability, honesty and benevolence have emerged. The central research question therefore is:

How can trust among soldiers in the Royal Netherlands Army be assessed, and how can it be explained?

2. Theory

In this section some definitions of trust will be looked into. Next, components of trust will be discussed, or in other words: how do soldiers in the RNLA assess their trust in other soldiers, subsequently, the step to antecedents of trust will be dealt with. The discussion of components of trust will be linked with the presence of a code of ethics in organizations.

What is meant by trust? Going through definitions of trust, some elements appear time and again. Vulnerability is one of them, as in Baier's definition: "… Accepted vulnerability to another's possible but not expected ill will (or lack of good will) toward one."(Baier, 1986) or in ".. A state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another." (Rousseau, Sitkin, Burt & Camerer, 1998). In trusting, the trustor is vulnerable because it is not certain whether the trustee will act in good will. It is therefore that trusting always entails an element of risk (Boon & Holmes, 1991; Coleman, 1991; Lagerspetz, 1998; Weber & Carter, 2003). A risk is taken when the trustor lays immaterial goods, like his life, into the hands of a trustee, believing that he is willing and capable of treating these goods well, but never being sure (Luhmann, 2000). This uncertainty is expressed in definitions like "… Trust refers, in the main, to the extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people" (Cook &

Wall, 1980) or "... The willingness of a party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party." (Mayer, Davis, Schoorman, 1995).

These definitions are presented not with the intention to improve them, as they do not warrant that, but to express what is meant by trust. In trust, there are always at least two parties involved, and a valued good: there is the trustor, intending to leave a valued good into the hands of a trustee over whom he has no control, but of whom he believes that he (the trustee) will not damage it, and that his interests will not be violated (Baier, 1986). The reason why a trustor would do this is that he depends on the trustee, or else he could do whatever needs to be done himself. Several studies have inspired the way in which soldiers assess trust (e.g. Cook & Wall, 1980; Johnson-George & Swap, 1982; Baier, 1986; Butler, 1991; Mishra, 1996). Various factors of trust were identified in studies on, among others, trust within organizations, affective trust or trust in leadership. Mayer, et al. (1995) have listed a number of these studies (table 1).

Later McKnight, Cummings and Chervany (1998) identified four beliefs[8] essential for trust: competence belief, predictability belief, honesty belief and benevolence belief. They are discussed below.

Competence belief. Competence belief concerns the belief that someone has the mental and physical capacities to perform the task concerned (Cook & Wall, 1980; Butler, 1991; McAllister, 1995; Mishra, 1996; Lane, 1998). Competence is task-specific involving a certain skill, trade or profession. For example, the fact that soldiers believe that their fellow soldiers are competent in typical soldier skills like shooting, running the obstacle course, patrolling, standing guard and reconnaissance does not imply that these soldiers are competent in writing letters, repairing a car or installing a new program on the computer.

Competence belief incorporates a cognitive choice, a rational belief that a trustee commands the capabilities necessary to perform the task. Trustors believing in trustees' competence also believe that the risk is reduced that in a cooperative situation where skills are needed the

[8] The term "belief" is used as a subjective evaluation by the actor. Other terms, like "perception" or "conviction" are equally applicable.

Table 1. Trust antecedents by Mayer, Davis & Schoorman (1995).

Authors	Antecedent factors
Boyle & Bonacich (1970	Past interactions, index of caution based on prisoners' dilemma outcomes
Butler (1991)	Availability, competence, consistency, discreetness, fairness, integrity, loyalty, openness, promise fulfillment, receptivity
Cook & Wall (1980)	Trustworthy intentions, ability
Dasgupta (1988)	Credible threat of punishment, credibility of promises
Deutsch (1960)	Ability, intention to produce
Farris, Senner & Butterfield (1973)	Openness, ownership of feelings, experimentation with new behavior, group norms
Gabarro (1978)	Openness, previous outcomes
Giffin (1967)	Expertness, reliability as information source, intentions, dynamism, personal attraction, reputation
Good (1988)	Ability, intention, trustees' claims about how (they) will behave
Hart, Capps, Cangemi & Caillouet (1986)	Openness/congruity, shared values, Autonomy/feedback
Hovland, Janis & Kelley (1953)	Expertise, motivation to lie
Johnson-George & Swap (1982)	Reliability
Jones, James & Bruni (1975)	Ability, behavior is relevant to the individual's needs and desires
Kee & Knox (1970)	Competence, motives
Larzelere & Huston (1980)	Benevolence, honesty
Lieberman (1981)	Competence, integrity
Mishra (1996, comment by Van der Kloet))	Competence, openness, caring, reliability
Ring & Van de Ven (1992)	Moral integrity, goodwill
Rosen & Jerdee (1977)	Judgment or competence, group goals
Sitkin & Roth (1993)	Ability, value congruence
Solomon (1960)	Benevolence
Strickland (1958)	Benevolence

Source: An integrative model of organizational trust, Roger C. Mayer, James H. Davis, F. David Schoorman. Academy of Management Review 1995, Vol 20, No 3, 709-734.

trustees do not master these skills and trustors will be harmed. For example, soldiers getting in the back of a truck will assume that their colleague, the driver, can actually drive the truck and will not get them involved in an accident by his own doing. Belief in the driver's competence will attribute to trust in the driver in his role of driver.

Predictability belief. Luhmann (1979) mentions reduction of uncertainty as a precondition of trust. In order to reduce uncertainty about a trustee, a trustor wants to be certain about his intentions and behavior. This certainty can be derived from frequent interaction and co-operation in which reactions to different situations are assessed. Complete certainty is, as was already

discussed, impossible where trust relations are concerned: in trust, there is always the risk that reality might turn out different from the assessment. However, it will be possible to predict a trustee's behavior or reactions to some extent after a while, which yields information about the extent to which the trustee can be trusted: the more a trustor can predict a trustee's actions, the better the trustor can assess if his own interests are violated. This discussion may lead two ways: higher predictability does not necessarily imply that more trust can be given to the trustee, as it can be predicted that a trustee consistently acts in violation of the trustor's interests. As such, a trustee can be quite predictable but his behavior is harmful. In order for higher predictability to be a component of trust, positive behavior of the trustee is expected. This implies that not only a trustee's consistent behavior is necessary for trusting beliefs, but it should also be coupled with favorable, and at least harmless intentions. In other words, predictability should be connected with a certain degree of benevolence.

Both competence belief and predictability belief are cognitive aspects of trust in others, as a rational choice is made in the assessments of fellow soldiers' competence and predictability, but as seen above, emotional elements are indispensable to the formation of trust (McAllister, 1995).

Honesty belief. An honest person acts in accordance with his honor, an activity directly related to moral behavior. It implies that a person's actions are in accordance with agreements, or even promises (Butler, 1991; Mayer et al., 1995). Lying, cheating and stealing are out of the question as they are a serious violation of the trustor's interests (Fukuyama, 1995; Lagerspetz, 1998). Honesty relates to positive expectations, open communication, saying what one stands for, and behavior according to generally accepted moral standards within the organization. Honesty belief implies that a trustor believes that a trustee will follow up on his promises or agreements, and that the trustee is willing to act in accordance with generally accepted moral standards within the organization, implicitly or explicitly. Not following up on agreements or promises would violate the trustor's interests and therefore not contribute to trust formation. Honesty belief is closely related to benevolence belief as both incorporate a positive attitude by the trustee towards the trustor. Although both beliefs can be built up only by monitoring another's behavior, and as such could be regarded as cognitive, they are viewed here as emotional aspects of trust as they do not always contain a rational choice by the trustor. For example, a soldier newly placed with a unit can be initially welcomed by his colleagues, to learn later that those colleagues who pretended to be of good will, open and friendly have told negative stories about the soldier behind his back. The soldier does not make a rational choice to regard those

other soldiers as dishonest and non-benevolent, but he is bound to feel quite uncomfortable about them and get feelings of not trusting them.

Benevolence belief. Benevolence is "... The extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit move"(Mayer et al., 1995). Benevolence by a trustee towards a trustor implies that the trustee has positive intentions towards the trustor, a view supported by Baier (1986), Dirks & Ferrin (2001) and Boon & Holmes (1991). A trustor assessing the behavior of a trustee as benevolent is likely to develop a trusting belief towards the trustee as the chance of the trustor's interests being harmed is reduced. Benevolent behavior towards a trustor gives rise to some trusting belief but as long as it is uncertain whether the trustee is indeed capable of certain activities, benevolence belief is not sufficient. Moreover, as already discussed in the previous section, benevolence is a necessary precondition coupled with predictability. If good intentions exist, but in similar situations the trustee behaves as expected one time, and in an unexpected manner at another, this will not lead to a trusting belief with a trustor. Benevolence belief is more than just willingness; it is voluntary willingness to do good on the part of the trustee, incorporating a sense of altruistic behavior.

Personality and rules. An individual's personality is formed from early childhood, when he learns what to expect from his social context. For example, an infant has certain inborn expectations of his caretaker, like being fed when he is hungry. If he is always fed, he will assume that whenever he is crying in need, his expectations will be met. If he is not always fed, his expectations will be uncertain about being fed: he will not trust his caretaker. This general expectation sets in his mind and becomes so natural that he is not even aware of it: the expectation has become a part of his personality. The extent to which expectations are met shape lays the foundation for developing a trusting orientation. This trusting orientation, or disposition to trust, forms the basis for further trust development in others, and is thought to be an antecedent of trust, rooted in the personality of a person (Rotter, 1991; Boon & Holmes, 1991; Mayer, Davis & Schoorman, 1995; Couch & Jones, 1997; McKnight, Cummings & Chervany, 1998; Costa, 2000; Van der Kloet, Van Schuur & Sanders, 2001). The expectation is based on the extent to which other people in general are believed to act in accordance with his interests and will regard his well-being. If one holds a general attitude that others can be trusted it is likely that the belief that a specific other, or others, can be trusted will occur sooner. The general attitude that others cannot be trusted will lead to low trust in others. As such, the disposition to trust is a personality element of trust. On this basis the following hypothesis can be formulated:

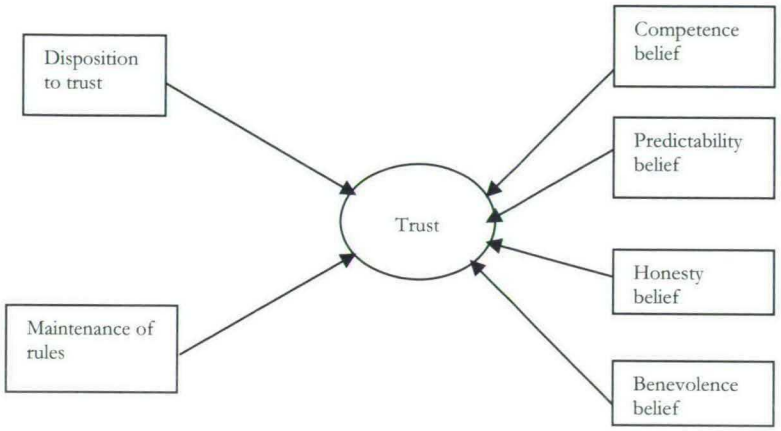
The higher disposition to trust, the higher trust (hypothesis 1).

Organizations impose rules on employees, and employees are expected to follow them. Rules are meant to influence employees' behavior in accordance with organizational standards and goals, and provide transparency. If organizations are consistent in their manner of maintaining rules, retribution will always follow a breaking of the rules, regardless of who broke a rule (see for instance Baron & Kreps, 1999). Consistent retribution is supposed to restructure unwanted or unexpected behavior into wanted and expected behavior. It also serves as a signal to other employees that rules should not be broken. The way in which rules are maintained thus shapes a view with the employees about what to expect from their colleagues and from the organization (e.g., Fukuyama, 1995; Horgan & Muhlau, 1998). The management is expected to take decisions in accordance with the rules. Different decisions taken against persons in similar positions will break trust down, or prevent trust from arising. For example, two women and a man apply for one job in a higher position. The management has stated the general rules that are applicable for this position, and they meet all three of them. In the course of the application, the management changes its standards for the best applicant for the job time and again, in favor of the man. This behavior will not invoke trust among the women, neither towards the management, nor towards their male colleague who may be suspected of keeping a secret agenda with the management. Moreover, transparency is broken down. This leads to the belief that an organization can use rules as incentives for trust among its personnel. By consistently maintaining rules, no employee is likely to suspect a colleague of secret arrangements with management and transparency is maintained (Lewis & Weigert, 1985). In fact, the organization provides a safety net against harmful behavior (McKnight, Cummings & Chervany, 1998). This leads to the next hypothesis:

The more consistently organizations maintain rules across all personnel, the more employees trust their fellow employees (hypothesis 2).

Summarizing, the four beliefs are supposed to be components of trust. By measuring these four components, an underlying element is measured: trust. Disposition to trust as a personality aspect is supposed to reflect the general attitude soldiers hold towards others, and it is an antecedent of trust. Maintenance of rules as an organizational aspect is supposed to reflect an instrument that can be used by the army in order to raise trust among solders, and it is also an antecedent of trust. The research figure is as follows:

Figure 1. The research model of components of trust.



This model was inspired by McKnight, Cummings & Chervany (1998) but it has been simplified as some elements in the original model were more suitable for a laboratory study than for the present kind of research (as stated by McKnight et al.). In this place it is emphasized that the model is used in this study to measure trust among soldiers, but it might as well be used to measure trust among any group of employees in an organization. In no way is it suggested that the model is solely suitable for military organizations, but as trust is so essential in organizations that operate under risky circumstances and because of an easy access to the military organization, it was only logical to perform this study within the army.

3. Methodology

Respondents. The data for this study were collected from 355 soldiers from seven units in the RNLA. All soldiers had served at least three months within their unit; the average time soldiers need to get accustomed to their comrades and commanders, and to life in their unit[9]. There

[9] Data from morale studies show that soldiers do not feel comfortable in their unit up to three months serving time, whereas from three months they like being a member of their unit. They probably need three months to get

were 214 soldiers and 125 corporals, 16 did not report their rank (5 %). 319 were men, 25 (7%) were women, 11 (3%) did not report their sex. The average time served was two years and four months, 19 (5%) did not report their time served. The average age was 22 years, 11 (3%) did not report their age[10]. On average, they had served nine months within the unit in which the survey was submitted, 27 (8%) did not report how long they had served within this unit. Their education ranged from (lower or advanced) elementary education (114; 32 %), vocational school (181; 51%) or general secondary school (43; 12%) to college or university (2; 1%). Nine persons (3%) reported a different school (unknown); six (2%) did not report their education. As many as 255 soldiers (91%) had never been deployed before, whereas 91 had and nine did not report about it.

The respondents served in units that were about to be deployed in Cyprus or in Bosnia. In the group, 300 soldiers were about to be deployed in Bosnia, and 55 in Cyprus. As the soldiers were not yet deployed and many had not been deployed before, no distinction will be made between the different groups.

Procedure. The Behavioral Sciences Division of the RNLA submits a morale survey prior to, during and following deployment to each unit that is about to be deployed. The purpose of this survey is to inform the commander about the morale of his unit. The commander can use the results of the survey to improve morale where necessary. The survey is submitted company-wise: members of the company are placed together in a classroom to fill out the survey. The trust survey was added to the morale survey. The current data pertain to the moment prior to deployment. To avoid social desirability, no mention was made of it that the survey dealt with trust. The response rate was high, 95%, and probably due to the way the survey is submitted. Non-response was incidental and concerned primarily random item non-response.

Survey. The items for the survey came from different sources. For disposition to trust, items from existing surveys from Rotter (1967) were used, and from Johnson-George and Swap (1982) and Wrightsman (1991) for components of trust. Adjustments needed to be made, as these items did not refer to military situations, and a number of items needed to be developed[11]. The items about components of trust were aimed at trust in colleagues within the same platoon[12]. As a platoon has a maximum size of 34 soldiers and corporals, the items refer

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accustomed in their unit. The authors thank Cyril van de Ven of the Dutch Army Behavioural Sciences Division for providing this information.

[10] Of 11 persons who did not report their sex, five also did not report their age.

[11] The complete Dutch questionnaire is available from Irene van der Kloet: IE.vd.Kloet@mindef.nl.

[12] Three platoons form a company.

to a maximum of 33 colleagues in the platoon. The items for competence belief refer to skills. The level of other soldiers' skills is assessed by level of training of other soldiers in the platoon, by the quality of work they deliver and by the opinion whether their colleagues are professional in their work. The items for predictability belief refer to the belief that soldiers know what other soldiers will do in a various situations. This is expressed in the assumption that they can count on each other. Honesty belief is expressed in believing that other soldiers will do as they say, and that soldiers can openly discuss all kinds of subjects with each other. Benevolence belief is assessed by the expectation that others will be ready to help, and a general belief that everyone does his best and does not spoil work for which another may have to pay the price. For scale analysis Mokken Scale Analysis[13] was used (Mokken, 1971). First the negatively formulated items were recoded. The analysis yields a four-item scale for disposition to trust. Four negatively formulated items were rejected due to a negative homogeneity-coefficient (H-coefficient) with one or more of the other items. One item was excluded as its H-coefficient was lower than the lower bound[14] (see appendix B table B1). For maintenance of rules a scale of three items was used, out of an initial group of nine items. The six items were excluded as their H-coefficient is lower than the lower bound (appendix B table B2). Three items for competence belief scale well (appendix B table B3). Out of five items for predictability belief, two items were rejected due to a negative H. What was left is a three-item scale (appendix B, table B4). The three items for honesty belief scaled well (appendix B table B5), but out of four items for benevolence belief one item was rejected due to a negative H-coefficient. Here too, three items were left in the scale (appendix B table B6).

One Mokken scale analysis for all fifteen items of competence belief, predictability belief, honesty belief and benevolence belief together yielded one scale with the same twelve items included and the same items three rejected or excluded as when performing analyses on the separate beliefs (appendix B table B7). Moreover, a Mokken scale analysis on the four sets of items of trusting beliefs separately also yielded four good scales. This leads to the conviction that, apart from three negatively formulated items, the scales for the four trusting beliefs were

[13] Some references: Van Schuur, W.H. (2003). Mokken scale analysis: between the Guttman scale and parametric Item Response Theory. *Political Analysis*, 11, 139-163. Or Sijtsma, K., and Molenaar, I.W. (2002). *Introduction to nonparametric Item Response Theory.* Vol 5 of *Measurement Methods for the Social Sciences.* Thousand Oaks: Sage.

[14] The lower bound in Mokken Scale analysis is usually set at 0.30. Items with lower than 0.30 are excluded from a scale.

good from various points of view. For the results of the scale analysis and some discussion about these results, the reader is referred to appendix B[15].

4. Results

First, a correlation analysis was conducted on the four observed beliefs and the two observed antecedents (see table 2). Table 2 shows significant correlations (at the .01 level, one-tailed) between all four components, and an insignificant correlation between the personality and rules aspects, disposition to trust and maintenance of rules. Furthermore, it can be seen that the correlation between the beliefs and disposition to trust is significant, as well as the correlation between maintenance of rules and the beliefs, except for predictability belief. To test the model regression analysis was used. As a dependent variable trusting beliefs was taken as one scale, with disposition to trust and maintenance of rules as independent variables. The results of the regression analysis are presented in table 3.

Both independent variables are good predictors of trusting beliefs: disposition to trust has a significant beta of .28, so hypothesis 1 can be confirmed. The beta of maintenance of rules is lower, but still significant at .19. Hypothesis 2 can be confirmed as well. The R-square is .11, meaning that 11% of the variance in trust is explained by disposition to trust and maintenance of rules. The demographic variables of age, time served at the present post, time served in the army and education, were added in the regression analysis to check their influence on our model. Age has a negative significant effect on trust with a beta of -.16, but not significant enough to cause a change in the R-square. Time served at the present post, time served in the army or education level bear no effect on trust.

[15] Upon examining the scales with reliability analyses, almost the same results can be reported as with Mokken scale analysis. The best scale for competence belief is the same three item scale as in MSP, with an alpha of 0.63. The best scale for predictability belief is the same three item scale as in MSP, with an alpha of 0.73. The best scale for honesty belief is the same three item scale as in MSP with an alpha of 0.65. The best scale for benevolence belief is the same three item scale as in MSP with an alpha of 0.76. When scaling all fifteen items together, the best scale is achieved with the same twelve items as in MSP, with an alpha of 0.88.

Table 2. Correlation analysis between disposition to trust, maintenance of rules and components of trust.

Variable	Mean (S.D.)	Disposition to trust	Maintenance of rules	Competence belief	Predictability belief	Honesty belief	Benevolence belief
Disposition to trust	11.77 (3.01)	1.00					
Maintenance of rules	9.04 (1.33	.008	1.00				
Competence belief	8.74 (1.48)	.186**	.270**	1.00			
Predictability belief	8.98 (1.60)	.230**	.103	.582**	1.00		
Honesty belief	9.11 (1.50)	.210**	.146*	.588**	.629**	1.00	
Benevolence belief	9.39 (1.59)	.257**	.126*	.589**	.575**	.616**	1.00

** correlation is significant at the .01 level

* correlation is significant at the .05 level

Table 3. Regression analysis of disposition to trust and maintenance of rules on trust

	Bèta	t	Sig
Disposition to trust	.275*	4.17	.000
Maintenance of rules	.187*	2.83	.005
R^2	.11		

Significant betas are marked with an asterisk.

5. Discussion, conclusions and recommendations

Drawing from theoretical studies by, amongst others, Mayer, Davis and Schoorman (1995) and by McKnight, Cummings and Chervany (1998) it was tested how four beliefs, competence belief, predictability belief, honesty belief and benevolence belief together are components of trust. Components of trust are essential as trust is a sensitive subject and, as such, likely to be subject to social desirability in surveys. By indirectly measuring trust, using these four components, it can be expected that more reliable answers are given pertaining to trust.

Soldiers assess if they can trust other soldiers by other soldiers' perceived competence, predictability, honesty and benevolence. Skills are learned during training through which soldiers go together. As they cannot constantly monitor their colleagues' skills, at some time they will have to assume that their colleagues are skilled. This is done by level of training of other soldiers in the platoon, by the quality of work they deliver and by the opinion that their colleagues are professional in their work. Soldiers assess other soldiers' predictability by the assumption that they can count on each other, but also by the way in which they expect their colleagues to react in different situations. They know where they stand with each other. Other soldiers' honesty is assessed by the extent to which soldiers think other soldiers follow up in doing what they say. This honesty belief is also assessed by the openness of soldiers amongst themselves: whether they say what they think about each other. Ideas and expectations are openly discussed among soldiers, again expressing honesty among them. The

fourth aspect, benevolence belief, is assessed by the extent to which they expect their colleagues to work accurately, by their willingness to help each other and the general opinion that they co-operate quite well in the platoon. This aspect incorporates an extent of altruistic behavior, as the willingness to assist does not require reciprocity from the receiver.

As a first interesting result, the study shows that trust is well measured by a twelve item scale, so social desirability directly related to trust, quite likely when trust is measured by asking the direct question "do you trust your colleague?" is ruled out. However, it cannot be rules out that some social desirability may remain when questions are asked about these four components. .

Furthermore, what is striking is that the four components reflect aspects mentioned in the Dutch army Code of Ethics. This Code of Ethics is intended as a means to an end of moral conduct by army personnel . In this way, the army can promote trustworthy behavior by its personnel in educating it in the Code of Ethics. Any soldier can talk to any other soldier about his conduct and base himself upon these general rules that everyone needs to abide by. Officers and non-commissioned officers can promote this by setting a good example and addressing their personnel about the Code as well. Although the Code of Ethics had a difficult start in the RNLA and never really got the place it deserved, army ethics get increasing attention within the army (Van Iersel & Baarda, 2002). A more prominent role for the Code of Ethics in army training and day-to-day routine is therefore encouraged. Other organizations that have adopted a code of ethics can follow this procedure and thus promote interpersonal trust among its personnel. As such, a code of ethics serves more organizations than just the army.

A second interesting result from this study is that organizations can promote interpersonal trust by maintaining rules consistently across its personnel as maintenance of rules precedes trust. This contributes to transparency, which is likely to drown in the many mergers of organizations in the past years. Interpersonal trust is bound to contribute to a better functioning of these organizations. This is also important information for any organization: maintaining rules in a consistent manner promotes transparency within an organization. Organizations, the army included, have an excellent instrument here to lay down a solid foundation of trust among its personnel.

Trust formation is also preceded by a general belief that others can be trusted, often called disposition to trust. This personality aspect seems hard to influence by an organization. The influence of soldiers' age, time served in the present post, time served in the army and

soldier education was also considered, but none of these demographic aspects influences trust in other soldiers.

Apart from disposition to trust and maintenance of rules, it may be expected that other elements are likely to precede the formation of trust, as the amount of explained variance in trust did not appear to be quite high. A search for these elements opens fields for further study: how can trust be explained further, apart from maintenance of rules and disposition to trust?

As was already said: not only the army can draw its conclusions from this study, but other organizations as well. Where more organizations value ethical behavior by its personnel, trustworthy behavior, as part of ethical behavior, can be promoted by maintenance of rules and maintaining a code of ethics.

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Chapter 2. How Trust develops among Soldiers on a Mission[16]

1. Introduction

A Dutch saying runs that 'trust arrives on foot but leaves on horseback', meaning that it takes time for trust to emerge, but a breach of trust is easily brought about. This easy breach of trust is caused because of its vulnerability (e.g. Luhmann, 1979; Coleman, 1990; Boon & Holmes, 1991; Lewicki & Bendict Bunker, 1996; Meyerson, Weick & Kramer, 1996). Trust is important because a trusting person assumes that the risk of being taken advantage of or the risk of being damaged by another person's actions is minimal, and this stimulates co-operation. In organizations where risk taking is part of the daily work and smooth co-operation is necessary, such as the military, trust is essential.

Studies of trust often concern components of trust and are based on a one-shot measurement only, that is, trust is examined at one moment only (e.g. Melohn, 1995; Lewicki, McAllister & Bies, 1998). This study, however, encompasses three consecutive measurements of trust within the same units and focuses on the development of trust after its emergence and on possible influences related to its development. Other research (Van der Kloet, Sanders & Van Schuur, forthcoming, see also chapter 1 of this book) showed that trust consists of the following four components: competence (are colleagues capable of fulfilling their tasks?), predictability (to what extent can a colleague be counted on?), honesty (indispensable, because it incorporates following up on promises) and benevolence (the probability that someone will help, even when not asked but of his or her free will). Soldiers need these components to reduce their uncertainty about other soldiers' behavior and to lower the risk that they will be harmed. A certain amount of risk and uncertainty will remain, or else trust would be superfluous (Lagerspetz, 1998).

Two elements are known to precede trust (Van der Kloet et al., forthcoming, see also chapter 1 of this book). First, consistent maintenance of rules by unit command gives soldiers the feeling that they are treated equally and that rewards and sanctions are distributed equally.

[16] The authors of this chapter are Irene E. van der Kloet, Joseph L. Soeters and Karin Sanders. This chapter has been published in a special issue of Small Wars and Insurgencies (in print).

Consistent sanctioning and rewarding makes every soldier aware of his rights and it may function as an incentive for proper behavior, reducing uncertainty about other soldiers' behavior. Second, disposition to trust is generally assumed to be an antecedent of trust, i.e. a 'stable within-party factor'[17] (e.g. Mayer, Davis & Schoorman, 1995; Van der Kloet et al., forthcoming).

Trust is important for the army for an external and an internal reason. The external reason relates to the various situations that servicemen may find themselves in during peace operations. They contact the local population and servicemen from other countries, people from various cultural backgrounds. They may come across minefields, or be confronted with suicide attacks. In all these situations they need to act with competence and predictability, and they must count on each other, which relates to benevolence and honesty. In such situations they need to hang on to their mutual trust to survive.

The internal reason relates to the fact that they live closely to each other for a longer period of time in the deployment area, on the base. Living so closely together, tensions eventually seem unavoidable, but as they have to co-operate during their mission, trust seems a solid base. Moreover, soldiers may need to operate independently, in small groups, and their behavior cannot constantly be monitored, so their supervisors must trust them.

Morale studies in Israel and the RNLA mention trust as an element of morale (Gal, 1986; Van Tintelen, Tibboel, Swanenberg & Van de Ven, 2001). Although the importance of trust in military operations is widely recognized (e.g. *Landmachtdoctrinepublicatie II, Deel A,* 1998), none of these studies digs into the development of trust during missions and factors that may influence this development. As it is unknown how trust will develop during a deployment, the present study is as unique as it is explorative, in that it examines:

How does trust develop over a six-month mission, and how can this development be explained?

Below, some general theoretical notions on the formation of trust will be presented and the development of related subjects will be discussed in order to explore the time-dependent development of phenomena, such as cohesion and solidarity. Subsequently, the method employed in the study at hand will be described, after which the development of trust will be extensively examined from several angles. Trust as a whole, but also its separate components, competence, predictability, honesty and benevolence, will be dealt with.

[17] Trust thus assessed consists of four components and two antecedents. By components an individual assesses trust in

Moreover, a distinction will be made between cognitive components on the one hand (competence and predictability) and emotional components on the other (honesty and benevolence). The chapter closes with discussion, conclusion and recommendations.

2. Theory

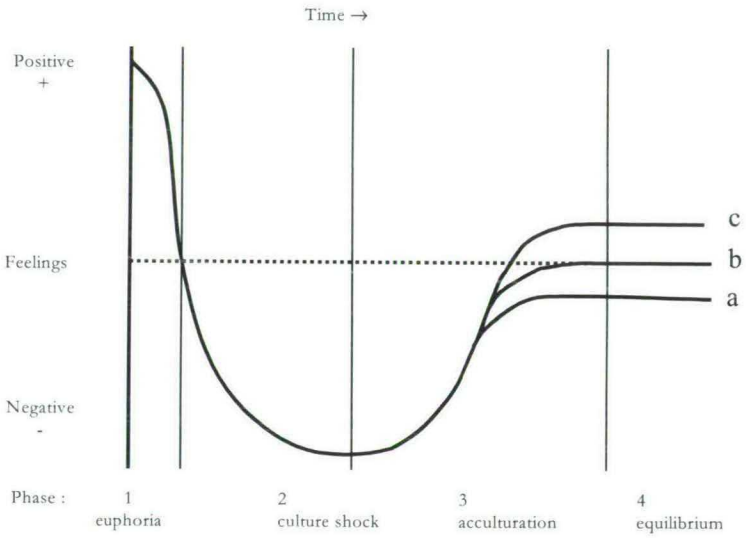
A possible pattern of trust development. Time is essential for the development of trust, as it is needed to build up beliefs about each other's behavior. The longer people interact, the longer their "shadow of the past" (Axelrod, 1984; Meyerson et al., 1996; Raub, 1997). Time also pertains to future co-operation: the prospect of cooperating in the future casts a shadow upon the future trustworthiness of the other person, and yields ample possibilities to monitor an individual's behavior. Bartone and Adler (1999) present an example of both the impact of the shadow of the past and the shadow of the future in a study on cohesion among soldiers during a deployment mission. In this study cohesion was found to be low in the beginning of the deployment, when soldiers were just beginning to co-operate. Towards the middle of the deployment, when both the shadow of the past and the shadow of the future met, cohesion increased. Towards the end of the deployment, when the shadow of the past was long but the shadow of the future became short-lived, cohesion was found to decrease again. A similar inverted U-pattern – starting out low, reaching a high point around the middle and decreasing again toward the end- is found in a study on the development of solidarity among Ph.D. students (Koster, Sanders & Van Emmerik, 2002). Both the shadow of the past and the shadow of the future were shown to be important for solidary behavior among these students. Of course, trust, cohesion and solidarity are not the same. However, trust might follow a similar pattern as trust, like cohesion and solidarity, indicates relatively strong, direct, intense, frequent or positive ties between people (Collins, 1988; Manning, 1991; Bartone & Kirkland, 1991; Faust & Wassermann, 1997).

There is another possible development, though. A study mainly concerned with cultural issues sheds a different light on the possible development of trust over time. More often than not, it appears that soldiers have high expectations about a deployment (Van Gelooven & Van de Bos, 2000), but these expectations are not always met: servicemen may

another person, whereas antecedents precede trust formation.

believe they are going to do exciting work, but in reality what they do most is patrol areas and gather information from the local people and sometimes experience boredom (Harris & Segal, 1985). Actually, they often do social work rather than soldiers' work. Disappointment, as a consequence, is likely. Hofstede shows this in his acculturation curve, shown in figure 2 (Hofstede, 1991).

Figure 2. The acculturation curve (source: Hofstede, 1991)



Hofstede, G.H. (1991) *Cultures and Organizations. Software of the Mind,* McGraw Hill, London.

In the beginning there is a feeling of euphoria (phase 1), caused by the excitement of seeing another country. After arrival in that other country a culture shock follows as the values, customs and rituals in the new country appear to be totally different from what people are used to at home (phase 2). Even if people have been prepared for this in information meetings, reality may prove different. This may be paralyzing and lead to feelings of fear and hostility towards the new environment. This phase changes into a phase of acculturation, in which the soldier learns to adjust to the new circumstances (phase 3). Eventually a new balance is found (phase 4) in which the new environment may be experienced worse than home (level a), just as

good as home (level b) or even better than home (level c). This curve may apply to the military, as soldiers to be deployed get information about the deployment area and are trained for various situations. Once in the deployment area, reality may prove differently. Moreover, they are separated from home, family and friends. Anxiety about the upcoming mission can turn into disappointment and feelings of distress once they are deployed, initially causing a reduction in trust in terms of competence belief, predictability belief, honesty belief and benevolence belief. However, after a certain period a recovery will take place as they get accustomed to their new situation and get to know their fellow servicemen better.

In summary, different curves, a U-pattern or an inverted U-pattern, may be expected as the missions examined are different, but other possible patterns - 'half U's' or no changes at all - are not a priori excluded.

Before presenting the results, the various aspects of trust will be discussed at greater depth, first. Trust is formed in interpersonal interaction and may or may not arise when co-operation has lasted for some time (Meyerson et al., 1996; Raub, 1997). As mentioned above, four components appear prominent in the formation of trust: competence belief, predictability belief, honesty belief and benevolence belief (e.g. Cook & Wall, 1980; Lewis & Weigert, 1985; Gambetta, 1988; Good 1988; Butler, 1991; McAllister, 1995; Melohn, 1995; Lagerspetz, 1998; McKnight, Cummings and Chervany, 1998; Van der Kloet et al., forthcoming).

Competence belief. Competence belief concerns the belief that someone else has the capacities to perform a task. This assumption can only hold if a soldier knows or may assume that other soldiers indeed possess military prowess. Soldiers have trained for a deployment, increasing their competence, and also form beliefs about their fellow soldiers' competence. During deployment soldiers continuously practice what they have learned. Their competence must help them to fulfill the assignment, but also to survive during a crisis. Soldiers who believe in their colleagues' competence are aware that they are capable of protecting them in difficult situations. This competence belief is part of their trusting belief in their colleagues.

Predictability belief. During army training, soldiers learn how to deal with various circumstances. Their fellow soldiers must know how they will react, so a certain amount of predictability is needed. The actions to be taken are standard procedures: if A happens, you do B. The reason for this is that soldiers, who operate in teams, will know what to do themselves and what they can expect from their fellow soldiers, and it makes each soldier's action rather predictable.

During their mission-oriented training soldiers refine their skills and train for the worst-case scenario. This is likely to increase their predictability and mutual trust.

Honesty belief and benevolence belief. Close co-operation between soldiers necessitates an open relation and a following up on promises, which requires honesty. Also, they will want their comrades to help them when needed, even when not asked for, which calls for benevolence. Honesty and benevolence belief can be formed during mission-oriented training. For some soldiers this mission-oriented training is a group training, but for others it is an individual training, dependent upon their task in the deployment area. One consequence of this is that during mission-oriented training honesty and benevolence belief can sometimes be difficult to build up. This is different for the build-up of competence belief and predictability belief as these latter components can at least be assumed to be built up as a result of going through training together. As such, competence belief and predictability belief are cognitive components, where honesty belief and benevolence belief are more emotional components.

Competence belief, predictability belief, honesty belief and benevolence belief are components of trust, as a person's (a soldier's) trust in others is composed of these four aspects. If someone is asked whether or not he trusts someone else, the answer may be that he does so, because he has noticed that this person is competent, predictable, honest and benevolent. Components require actual recognized actions by another person and differ from antecedents, as antecedents precede trust formation and as such can be present before someone has had time to get to know colleagues better. Disposition to trust and maintenance of rules are seen as antecedents of trust (see also Van der Kloet et al., forthcoming).

Disposition to trust. The disposition to trust is the trusting attitude an individual has developed since childhood, influenced by how others have treated him (McKnight et al., 1998; Costa, 2000). Mayer calls it "...a stable within-party factor that will affect the likelihood the party will trust"(Mayer et al., 1995). Soldiers work closely together during a deployment in a foreign area. They have no one else to turn to but their fellow soldiers, with whom they work during the day, recreate when off duty and share their sleeping quarters. Interpersonal incidents like arguments and disagreements that lead to a breach of trust will happen, but will they influence their disposition to trust? If trusting beliefs become more positive, the general belief that other people usually can be trusted may become more positive too. Likewise, if trusting beliefs in other soldiers decline the general belief that other people can usually be trusted may decline as well. This raises the question whether disposition to trust is really stable, or that it can be

influenced by trusting beliefs. If the latter is the case, there is a two-way interaction between disposition to trust and trusting beliefs: they influence each other.

Maintenance of rules. The army is a hierarchic organization that heavily leans on rules and the structuring of processes. Rules give structure and certainty to an organization and its environment. The army rules prescribe not only army activities in detail, such as how to maintain vehicles, how to stand guard, how to write letters, how to dress in various situations, how to hoist the flag, but also how to learn skills and maintain drills. Rules are an important part of the functioning of the army. Army units maintain rules to give direction and structure to their operations. Commanders will try to reduce uncertainty as much as possible during deployment by applying the rules strictly, thus trying to attain maximum security for their people. This may be especially applicable in a deployment area. Rules are also meant to be maintained in an even-handed manner for all unit members, and consistently over time. If a soldier behaves in an untrustworthy way towards his comrades and such behavior is consistently sanctioned by unit command, his colleagues will get the impression that trustworthy behavior is promoted and that untrustworthy behavior is discouraged. As such, maintenance of rules by unit command serves as an incentive for trust in other soldiers. It is the task of the leadership, officers and non-commissioned officers to see to it that these rules are maintained by everyone. Still, the maintenance of rules can differ among units, because some officers and non-commissioned officers are more lenient than others, allowing a greater flexibility in rule application than others. Hence, development of trust may differ between units, depending on the way in which rules were maintained.

Above, the components of trust, as essential elements in assessing trust in other people, were discussed along with the antecedents of trust, aspects that precede trust formation, even when interpersonal interaction has not yet taken place. The following section deals with a description of the samples and the way in which the data were collected. Besides, the areas in which the units were deployed are described.

3. Methodology

A questionnaire was submitted to groups of servicemen at three moments, the first time being just after the units had finished their mission-oriented training and prior to their departure for the deployment area, the second time more or less halfway their deployment, which is on

average after having been in the deployment area for three months, and the third time immediately after their post-deployment leave, which is around two weeks after they had returned from their deployment. The data are not panel data: although it would have been interesting to have the respondents' army numbers and compare pre-deployment (t1), mid-deployment (t2) and post-deployment (t3) at the individual level, this was prohibited by army command for privacy reasons. Therefore, averages of unit data have been used. The entire group of respondents consisted of six units: A and B are the first two units that went to Bosnia, C, D and E are the three units that succeeded them, and F is a unit that went to Cyprus.

341 soldiers and corporals responded to the questionnaire at pre-deployment (t1), 352 soldiers and corporals at mid-deployment (t2) and 272 soldiers and corporals responded at post-deployment (t3). The number of respondents is much lower at post-deployment mainly because in unit C only 11 respondents filled in the questionnaire at t3. Therefore, the results of unit C at t3 must be approached with caution. As mentioned, the samples differ in size between the three measurements, because sometimes soldiers were on leave, away on duty, sick or absent for other reasons, and could not fill in the survey.

The response throughout the study was generally high, on average 90%, though there is high item non-response in maintenance of rules at t3: more than 50%, on average, in all units. The results of maintenance of rules at t3 therefore must be considered with caution.

Most of the soldiers and corporals were men, 94%, and 6% were women. Their average age was 22 years. Many of them (73%) had never been deployed before. Their education was mainly lower general secondary education (31%), lower vocational education (29%), intermediate vocational education (22%), or high school (10%). On average, they had been in the army for almost 3 years (33 months, minimum 6 months and maximum 9 years) and a little over a year with their own unit (15 months, minimum 3 months and maximum 6 years). Table 4 gives an overview of the main demographic data per unit at pre-deployment.
Apart from the surveys some interviews were conducted with servicemen of various ranks that went to Cyprus and to Bosnia, after return from their deployment. In addition, the first author visited one of the deployments in Bosnia and observed everyday life in the deployment area , and also took the opportunity to talk to servicemen from different ranks.

Table 4. Demographic data of six units on deployment abroad.

Unit and unit size at t1, t2, t3	Sex (m/f)	Average age	Average time served in the army	Average time served within the unit
A (n=52 / 58 / 72)	94 / 6	22	32 months	10 months
B (n=71 / 84 / 40)	88 / 12	21	35 months	17 months
C (n=53 / 65 / 11)	100 / 0	21	31 months	15 months
D (n=77 / 68 / 64)	96 / 4	21	32 months	15 months
E (n=33 / 31 / 26)	100 / 0	22	33 months	19 months
F (n=55 / 46 / 45)	91 / 9	23	35 months	12 months

Deployments, deployment areas and unit size. A unit's deployment formation takes place four months prior to deployment. The basic unit to go on a mission is a battalion. As not all personnel needed in the deployment area is originally present in the battalion, personnel from as many as fifty other units may be added. This is important to know as it implies that many soldiers do not know each other well until briefly prior to deployment and this may influence their trust in each other. This moment of unit formation is also the start of a four month- mission-oriented training, during which the unit is prepared for the worst possible situations. In this training basically everyone going on deployment with the unit participates. However, some soldiers are added to the unit only shortly before deployment, due to their indispensability in their own unit, late notice, or other reasons. After deployment not only do the soldiers from other units return to their own unit, but also many soldiers belonging to the battalion leave the unit as their contracts expire[18], which often results more or less in a decomposition of the unit. This may influence their trust towards the end of the deployment as their shadow of the future becomes quite short.

Over the past ten years many Dutch troops have been deployed in Bosnia and Herzegowina (usually referred to as Bosnia, in former Yugoslavia). During the war in Bosnia, these troops were deployed as United Nations forces (UNPROFOR, United Nations

[18] Soldiers in the RNLA sign a contract for a limited number of years, from three to five years. Sometimes they can extend the contract, sometimes they have to leave the army when the contract expires.

Protection Force), but after the Dayton Peace Agreement they were deployed as forces under command of the North Atlantic Treaty Organization (NATO), first as Implementation Force (IFOR), then as Stabilization Force (SFOR). The size of the Dutch troops in SFOR is a battalion, apart from some smaller groups and individuals that are located at various places in Bosnia. The Dutch battalion in Bosnia operates under combined[19] command (BiH-command) but the battalion commander can operate quite independently. The battalion's tasks are to patrol the areas, gather information among the local population, disarm civilians (many civilians in Bosnia kept a weapon at home at that time), keep relations between the different groups (Bosnian Serbs, Bosnian Croatians, Bosnian Muslims) stable, locate mines, clear minefields, and generally help to rebuild the country. The units patrol in small groups on foot, or by car, and they are the eyes and ears of the battalion commander and his staff. They hand out leaflets to inform the local population about their activities. Usually, the contacts between soldiers and locals are intensive and rated positively, as one SFOR commander stated in a briefing. The training, a preparation for the worst possible situations, may have given rise to expectations of exciting work. It follows a regular schedule and adjustments can be made if the Operational Staff of the Royal Netherlands Army, the body that monitors all deployments of the RNLA, deems it necessary.

During deployment the tasks are not considered very exciting by the soldiers, but as the patrolling area is large, boredom does not easily develop, in contrast to other peacekeeping missions (Harris & Segal, 1985). No matter how quiet a deployment may seem, incidents happen. Towards the end of the first deployment in Bosnia, tensions among the local ethnic groups grew because of upcoming elections in the area. In order to gain voters' support many politicians tried to discredit their rivals using a language of hatred[20]. The deployed units had to work day and night to secure strategic positions in their area, and instead of thinking about returning home, security in their area was their main focus. After their rotation their successors had to continue this hard work. Moreover, the general attitude towards Muslims resulting from the attacks on the World Trade Center in New York City made them more alert as tensions grew among the local population, many of whom are Muslim.

The other deployment area in this study is Cyprus, an island in the Mediterranean and a British colony until 1960. Its population comprises a Turkish minority (20%) and a Greek

[19] Combined operations are operations that are carried out by several countries together under the flag of an international organization, such as NATO.
[20] http://www.ihf-hr.org/viewbinary/viewdocument.php?doc_id=1971

majority (80%). In 1963 archbishop Makarios of Cyprus proposed reformations, which caused military violence between Greece and Turkey over Cyprus. In 1964 the United Nations Peacekeeping Force in Cyprus (UNFICYP) was deployed in order to keep Turkish and Greek populations on Cyprus separated. Its task was to see to a cease-fire between the Greek and the Turkish Armies. UNFICYP was placed under British command, but supported by other countries. The RNLA has participated in UNFICYP during six consecutive rotations, deploying one company (about 100 men and women) every six months. The commander of a Dutch UNFICYP company did not have the same autonomy as a Dutch SFOR battalion commander , as the UNFICYP company commander operated under direct command of the British commander. British and Dutch forces closely co-operated and the Dutch operation was strictly supervised by the British. The company's platoons all had an area in the neutral zone between the Turkish and the Greek part that they had to patrol on foot, by bike or by car. Each area contained a number of manned observation posts. The patrolling areas were quite small, so soldiers lived and worked closely together. The observation posts were in the neutral, UN controlled zone between the Turks and the Greeks. At some places this zone was a kilometer wide, but at other places it was very narrow, sometimes no more than 20 meters. Incidents happened daily, such as Turks and Greeks throwing stones at each other, one of the parties moving the barbed wire, or pointing a loaded gun at the other party, or both parties challenging the UN soldiers. In all these incidents, UNFICYP soldiers were literally in the middle, and needed to negotiate between the parties, the Dutch soldiers as well. The Dutch soldiers initially found it difficult to negotiate, but by getting into a daily routine they even got quite good at it. The unit in Cyprus worked under a strict British rule, everything had to go by the book, a strictness most Dutch soldiers were not really familiar with. However, Dutch soldiers stated in interviews that the strictness of the British rules was only on the outside: if you did not stick to the rules you could get away with it if you were not caught, a view openly expressed by British officers and non-commissioned officers. Dutch soldiers were not used to this, and they were appalled by it, which caused a feeling of togetherness and an incentive to do better than the British (e.g. Soeters & Bos-Bakx, 2003).

Due to the different characteristics of the deployments various outcomes may be expected. In Bosnia, there had been a war, quite recently. Soldiers who went to Bosnia would have heard stories about it. They could work rather independently and worked in a large area, but they may have been disappointed about the mission because they might have expected more excitement.

The soldiers in Cyprus worked under close supervision of the British army. It was not the first time a Dutch unit was part of UNFICYP, so it may be assumed that they had heard stories about Cyprus before they went there. The situation in Cyprus had been stable for decades. Moreover, unit command had emphasized that it certainly was no holiday, although they were going to a holiday island. Initially their expectations of the deployment would not have been too high.

4. Results

The four beliefs, competence, predictability, honesty and benevolence, as well as disposition to trust and maintenance of rules were measured at three moments. Competence belief, predictability belief, honesty belief and benevolence belief together represent trusting belief and as the intention was to test the development of trust as a whole, these components separately were not only measured at three moments, but also the scores for the four beliefs were added up into one. Besides, an overview was made of the changes in the four components (table 8).

Trust was assessed by four beliefs: competence belief, predictability belief, honesty belief and benevolence belief. In a correlation analysis of the four beliefs, of all units together and per unit, as well as per moment – pre-deployment (t1), mid-deployment (t2) and post-deployment (t3)- it is shown how these four relate to each other at the three measurements (table 5). Moreover, the four beliefs form a Mokken scale (Mokken, 1971) at t1, t2 and t3. Table 5A shows how the correlations between the four components of all units together are significant at the .01 level. The correlations between the components per unit at the three measurements are also shown. Nearly all correlations are significant, with the exception of the correlations between competence belief and the other three beliefs in unit C at t3. This bias in results may be explained by the small number of soldiers in unit C at t3. The correlations in unit E are not significant between competence belief on the one hand and honesty belief at t1

Table 5: Correlations between the four beliefs at pre-deployment (t1), mid-deployment(t2) and post-deployment (t3).

Table 5A: Correlations between the four beliefs for all units together

Belief	**M (S.D.)**	**Competence belief**	**Predictability belief**	**Honesty belief**
Competence belief				
t1	8.74 (1.48)			
t2	8.47 (1.73)			
t3	8.58 (1.58)			
Predictability belief				
t1	8.98 (1.60)	.582**		
t2	8.83 (1.65)	.621**		
t3	8.78 (1.51)	.673**		
Honesty belief				
t1	9.11 (1.50)	.588**	.629**	
t2	8.90 (1.48)	.556**	.697**	
t3	8.80 (1.51)	.554**	.658**	
Benevolence belief				
t1	9.39 (1.59)	.589**	.575**	.616**
t2	8.85 (1.75)	.680**	.703**	.632**
t3	8.94 (1.60)	.697**	.703**	.684**

** correlation is significant at the .01 level

Table 5B: Unit A (t1 n=52; t2 n=58; t3 n=72)

Belief	**M (S.D.)**	**Competence belief**	**Predictability belief**	**Honesty belief**
Competence belief				
t1	8.62 (1.37)			
t2	8.41 (1.86)			
t3	8.63 (1.56)			
Predictability belief				
t1	8.71 (1.40)	.427**		
t2	8.69 (1.88)	.642**		
t3	8.89 (1.52)	.720**		
Honesty belief				
t1	8.96 (1.39)	.557**	.602**	
t2	8.86 (1.54)	.601**	.741**	
t3	8.89 (1.36)	.642**	.604**	
Benevolence belief				
t1	9.20 (1.30)	.518**	.463**	.552**
t2	8.66 (2.11)	.827**	.719**	.629**
t3	8.79 (1.68)	.787**	.818**	.645**

** correlation is significant at the .01 level

and t3 on the other, between competence belief and benevolence belief at t1, and between predictability belief and benevolence belief at t2. However, judging by the overall correlations between the beliefs in the units it may be said that these beliefs together represent trusting belief in other soldiers throughout deployment quite well, which also implies that trust is quite stable throughout the deployment insofar as all four components fairly equally comprise trust.

Table 5C: Unit B (t1 n=71; t2 n=84; t3 n=40)

Belief	**M (S.D.)**	**Competence belief**	**Predictability belief**	**Honesty belief**
Competence belief				
t1	8.48 (1.73)			
t2	8.29 (1.89)			
t3	8.35 (1.76)			
Predictability belief				
t1	8.64 (1.64)	.516**		
t2	8.76 (1.80)	.709**		
t3	8.70 (1.54)	.696**		
Honesty belief				
t1	8.86 (1.39)	.649**	.641**	
t2	8.83 (1.47)	.715**	.764**	
t3	8.97 (1.37)	.533**	.513**	
Benevolence belief				
t1	8.96 (1.52)	.475**	.522**	.624**
t2	8.94 (1.64)	.711**	.736**	.724**
t3	9.25 (1.39)	.664**	.566**	.605**

** correlation is significant at the .01 level

Table 5D: Unit C (t1 n=53; t2 n=65; t3 n=11)

Belief	**M (S.D.)**	**Competence belief**	**Predictability belief**	**Honesty belief**
Competence belief				
t1	9.06 (1.33)			
t2	8.42 (1.67)			
t3	9.45 (1.13)			
Predictability belief				
t1	9.48 (1.64)	.649**		
t2	8.73 (1.57)	.551**		
t3	9.09 (1.14)	.433		
Honesty belief				
t1	9.12 (1.64)	.516**	.659**	
t2	8.84 (1.61)	.552**	.770**	
t3	9.18 (1.25)	.432	.832**	
Benevolence belief				
t1	9.76 (1.61)	.669**	.720**	.602**
t2	8.66 (1.93)	.537**	.747**	.664**
t3	9.45 (1.21)	.345	.765**	.599*

** correlation is significant at the .01 level

* correlation is significant at the .05 level

Table 5E: Unit D (t1 n=77 ; t2 n=68 ; t3 n=64)

Belief	**M (S.D.)**	**Competence belief**	**Predictability belief**	**Honesty belief**
Competence belief				
t1	8.79 (1.74)			
t2	8.66 (1.70)			
t3	8.58 (1.57)			
Predictability belief				
t1	9.04 (1.48)	.641**		
t2	8.88 (1.64)	.636**		
t3	8.75 (1.33)	.567**		
Honesty belief				
t1	9.42 (1.53)	.741**	.703**	
t2	8.98 (1.54)	.523**	.611**	
t3	8.79 (1.44)	.576**	.693**	
Benevolence belief				
t1	9.68 (1.74)	.677**	.562**	.625**
t2	9.03 (1.80)	.738**	.693**	.723**
t3	9.14 (1.90)	.709**	.514**	.637**

** correlation is significant at the .01 level

Table 5F: Unit E (t1 n=33; t2 n=31; t3 n=26)

Belief	**M (S.D.)**	**Competence belief**	**Predictability belief**	**Honesty belief**
Competence belief				
t1	8.94 (1.24)			
t2	8.03 (1.50)			
t3	8.28 (1.57)			
Predictability belief				
t1	9.74 (1.59)	.483**		
t2	9.10 (1.47)	.346*		
t3	8.75 (1.33)	.698**		
Honesty belief				
t1	9.52 (1.43)	.240	.630**	
t2	9.20 (1.42)	.375*	.801**	
t3	8.79 (1.44)	.331	.551**	
Benevolence belief				
t1	9.68 (1.74)	.182	.433**	.498**
t2	8.72 (1.51)	.479**	.604	.546**
t3	9.14 (1.42)	.528**	.743**	.851**

** correlation is significant at the .01 level

* correlation is significant at the .05 level

Table 5G: Unit F (t1 n=55; t2 n=46; t3 n=45)

Belief	M (S.D.)	Competence belief	Predictability belief	Honesty belief
Competence belief				
t1	8.70 (1.59)			
t2	9.02 (1.48)			
t3	8.77 (1.58)			
Predictability belief				
t1	8.70 (1.65)	.677**		
t2	9.20 (2.07)	.657**		
t3	8.84 (1.60)	.716**		
Honesty belief				
t1	8.91 (1.57)	.573**	.501**	
t2	9.09 (2.06)	.448**	.786**	
t3	8.98 (1.60)	.661**	.837**	
Benevolence belief				
t1	9.21 (1.78)	.717**	.592**	.653**
t2	9.39 (2.88)	.526**	.866**	.787**
t3	8.96 (1.59)	.766**	.768**	.684**

** correlation is significant at the .01 level

Table 6 shows how disposition to trust and maintenance of rules correlate with trust (the four components taken together) at the three measurements, per unit.

The table shows many significant correlations between disposition to trust and trust and between maintenance of rules and trust, but there are exceptions: At t1 units A and E show no significant correlation between disposition to trust and trust. Moreover, unit E also shows no significant correlation between disposition to trust and trust at t2. Unit C shows no significant correlation between disposition to trust and trust at all.

As for the correlation between maintenance of rules and trust, unit D shows no significant correlations at all. Unit A shows no significant correlation at t2 and t3, unit C shows no significant correlation at t1 and t3, unit E shows no significant correlation at t2 and unit F shows no significant correlation at t1 and t2. Apparently, the correlation between disposition to trust and trust is stronger than between maintenance of rules and trust. This implies that a general belief that other people can be trusted contributes more to interpersonal trust than if

rules are maintained consistently. The contribution of disposition to trust and maintenance of rules to trust will be closer examined in a regression analysis.

Table 6: Correlation of disposition to trust and maintenance of rules with trust from pre-deployment through post-deployment.

Unit	Time	Disposition to trust Mean (S.D.)	Correlation with trust
A	t1	11.67 (1.84)	.191
	t2	11.27 (2.43)	.588**
	t3	11.96 (1.75)	.439**
B	t1	11.24 (1.98)	.405**
	t2	11.40 (1.59)	.412**
	t3	11.28 (1.68)	.406**
C	t1	11.55 (2.14)	.201
	t2	11.21 (1.75)	.144
	t3	11.73 (2.61)	-.014
D	t1	11.80 (2.12)	.426**
	t2	11.62 (2.05)	.631**
	t3	11.37 (1.89)	.398**
E	t1	11.87 (2.19)	.064
	t2	12.33 (1.81)	.312
	t3	1.73 (2.41)	.584**
F	t1	11.94 (2.04)	.342**
	t2	11.95 (2.19)	.768**
	t3	11.07 (1.84)	.622**
** correlation is significant at the .01 level			
* correlation is significant at the .05 level			

(table to be continued on next page)

(table 6 continued)

	Time	Maintenance of rules Mean (S.D.)	Correlation with trust
A	t1	9.09 (1.16)	.471**
	t2	9.00 (1.20)	.210
	t3	9.15 (1.03)	.263
B	t1	9.24 (1.37)	.554**
	t2	9.84 (1.08)	.290**
	t3	8.96 (1.33)	.558**
C	t1	9.48 (1.12)	-.034
	t2	9.14 (1.23)	.450**
	t3	9.71 (1.11)	.241
D	t1	8.91 (1.34)	.028
	t2	9.39 (1.53)	.173
	t3	9.50 (1.13)	.208
E	t1	8.28 (1.37)	-.389*
	t2	9.85 (1.29)	.349
	t3	8.62 (.77)	.590*
F	t1	9.02 (1.37)	.219
	t2	8.89 (1.59)	.220
	t3	7.89 (1.50)	.720**

** correlation is significant at the .01 level

* correlation is significant at the .05 level

Table 7 shows the significant t-tests for the differences between the three measurements, per unit and per antecedent or component[21]. These analyses were performed with an alpha of .10 as the groups are small and by using an alpha of .05 the risk of making a type I error (saying the measurements differ when in fact they don't) is quite large. Using an alpha of .10 makes the analysis more liberal (Stevens, 1996). Significant changes are indicated in italic numbers. For example, the change in maintenance of rules in unit B was significant between t1 and t2 and between t2 and t3, indicated by italic numbers in the "sig" column in that row under unit B. If only one change was significant, only one number is italic and the pattern in the last column

[21] It was briefly examined if adding up the units together and then doing the analyses would make any difference in the patterns. There appeared to be minor, non-significant changes in both the components and the antecedents when comparing pre-deployment, mid-deployment and post-deployment.

refers to that significant change only. The patterns show 21 flat lines, indicating that there are no significant changes at all; no significant changes in development have

Table 7: Paired samples t-tests of six units between pre-deployment, mid-deployment and post-deployment, per unit, per component and per antecedent

	Antecedent or component	t1-t2	sig	t2-t3	sig	Pattern
Unit A	Competence belief	-.255	n.s.	.581	n.s.	—
	Predictability belief	-.030	n.s.	-.666	n.s.	—
	Honesty belief	.842	n.s.	-.396	n.s.	—
	Benevolence belief	1.249	n.s.	-.463	n.s.	—
	Disposition to trust	1.350	n.s.	-1.65	n.s.	—
	Maintenance of rules	.530	n.s.	-1.00	n.s.	—
	Trust in colleagues	.515	n.s.	-.982	n.s.	—
Unit B	Competence belief	1.32	n.s.	-.358	n.s.	—
	Predictability belief	-.480	n.s.	-.153	n.s.	—
	Honesty belief	.550	n.s.	-.922	n.s.	—
	Benevolence belief	.311	n.s.	-1.63	n.s.	—
	Disposition to trust	-.878	n.s.	2.025	n.s.	—
	Maintenance of rules	-2.821	*.067*	3.845	*.031*	∩
	Trust in colleagues	.458	n.s.	-.547	n.s.	—
Unit C	Competence belief	2.664	*.076*	-2.996	*.058*	∪
	Predictability belief	4.044	*.027*	-.592	n.s.	\
	Honesty belief	2.588	*.081*	-2.473	*.090*	∪
	Benevolence belief	4.507	*.020*	.956	n.s.	\
	Disposition to trust	1.339	n.s.	-.208	n.s.	—
	Maintenance of rules	-.625	n.s.	-4.619	*.019*	/
	Trust in colleagues	2.467	*.090*	-2.913	*.062*	∪
Unit D	Competence belief	.742	n.s.	.840	n.s.	—
	Predictability belief	1.911	n.s.	.461	n.s.	—
	Honesty belief	3.902	*.030*	2.361	*.099*	—
	Benevolence belief	2.888	*.063*	-1.659	n.s.	\
	Disposition to trust	1.730	n.s.	2.918	*.062*	\
	Maintenance of rules	-2.617	*.079*	-.488	n.s.	/
	Trust in colleagues	2.728	*.072*	.472	n.s.	\

(table to be continued on next page)

(table 7 continued)

Unit E	Competence belief	4.283	*.023*	-3.516	*.039*	∪
	Predictability belief	3.094	*.054*	.126	n.s.	\
	Honesty belief	2.848	*.065*	4.853	*.017*	\
	Benevolence belief	4.339	*.023*	-4.938	*.016*	\
	Disposition to trust	-1.566	n.s.	3.884	*.030*	\
	Maintenance of rules	-10.294	*.002*	3.876	*.030*	∩
	Trust in colleagues	4.344	*.023*	2.680	*.075*	\
Unit F	Competence belief	-2.744	*.071*	3.800	*.032*	∩
	Predictability belief	-.115	n.s.	-.328	n.s.	—
	Honesty belief	.415	n.s.	-1.188	n.s.	—
	Benevolence belief	.284	n.s.	.272	n.s.	—
	Disposition to trust	1.143	n.s.	.578	n.s.	—
	Maintenance of rules	2.054	n.s.	4.702	*.018*	\
	Trust in colleagues	.523	n.s.	-1.419	n.s.	—

mostly been found in the four components, four times in disposition to trust and once in maintenance of rules. Twelve times there is a downward slope, a line going from the upper left corner to the bottom right corner, mostly found in the (emotional) components, once in maintenance of rules ands twice in disposition to trust. Four times a U-pattern, implying the acculturation-mechanism, is shown, three times in the components and one time in trust as a whole. Three times an inverted U-pattern is shown, two in maintenance of rules and one in competence. Two times an upward slope, a line from the lower left corner to the upper right corner, is shown in maintenance of rules. These results first of all imply that trust does not change so much over time, especially because out of the 21 flat lines, three refer to trust in colleagues as a whole, i.e. in units A, B (both Bosnia, first deployment) and F (Cyprus), units that clearly show the most flat lines. Unit C shows a mixture of patterns, with trust following a U-pattern and hardly changes in disposition to trust and maintenance of rules. Moreover, this significant change in maintenance of rules must be approached with caution as unit C was very small at t3 (n=11).

Table 8. Changes in order of beliefs per unit, throughout the deployment. Means are given between brackets.

Unit	**t1**	**t2**	**t3**
A	H-value = .054	H = .70	H=.75
	Benevolence (9.15)	Honesty (8.93)	Predictability (8.97)
	Honesty (8.85)	Predictability (8.84)	Honesty (8.89)
	Predictability (8.70)	Benevolence (8.86)	Benevolence (8.86)
	Competence (8.51)	Competence (8.70)	Competence (8.70)
B	H= .59	H = .75	H = .63
	Benevolence (8.97)	Benevolence (8.95)	Benevolence (9.19)
	Honesty (8.89)	Honesty (8.83)	Honesty (8.97)
	Predictability (8.73)	Predictability (8.79)	Predictability (8.70)
	Competence (8.52)	Competence (8.31)	Competence (8.30)
C	H = .69	H = .66	H = .78
	Benevolence (9.77)	Honesty (8.88)	Benevolence (9.45)
	Predictability (9.41)	Predictability (8.83)	Honesty (9.18)
	Honesty (9.10)	Benevolence (8.76)	Predictability (9.09)
	Competence (8.78)	Competence (8.57)	*
D	H = .69	H = .71	H = .66
	Benevolence (9.77)	Benevolence (9.03)	Benevolence (9.21)
	Honesty (9.41)	Honesty (8.97)	Honesty (8.85)
	Predictability (9.10)	Predictability (8.97)	Predictability (8.77)
	Competence (8.78)	Competence (8.69)	Competence (8.58)
E	H = .46	H = .56	H = .71
	Predictability (9.70)	Honesty (9.26)	Benevolence (8.86)
	Benevolence (9.67)	Predictability (9.15)	Predictability (8.62)
	Honesty (9.47)	Benevolence (8.74)	Honesty (8.43)
	Competence (9.00)	Competence (8.07)	Competence (8.14)
F	H = .63	H = .54	H = .70
	Benevolence (9.31)	Competence (8.95)	Benevolence (9.14)
	Honesty (8.92)	Benevolence (8.95)	Honesty (9.02)
	Predictability (8.84)	Predictability (8.93)	Predictability (8.98)
	Competence (8.80)	Honesty (8.82)	Competence (8.95)

* competence belief was excluded from the analysis.

Units D and E (both Bosnia, second deployment) show many downward slopes where most of these patterns cannot be ascribed to a certain period in the deployment as there is a mixture in changes between t1 and t2 and between t2 and t3.

This implies that generally in units D and E trust is quite stable as well during the deployment. The order in which the components, cognitive or emotional, appear with the six units at these moments gives a fairly constant pattern (table 8). Twelve out of eighteen times benevolence belief is the most prominent belief, and twelve times honesty belief is a runner up. Apparently, in trusting beliefs emotional elements are regarded more important than cognitive elements.

In order to examine the effect of disposition to trust and maintenance of rules on trust on trust throughout deployment a regression analysis was performed with disposition to trust, maintenance of rules and duration of co-operation as predictors and trust in colleagues as dependent variable (table 9). Disposition to trust and maintenance of rules account for 15% of the variance in trust at pre-deployment, 27% at mid-deployment and 26% at post-deployment. This means that at pre-deployment, mid-deployment and post-deployment the disposition to trust and maintenance of rules significantly contribute to trust in fellow soldiers, but it also implies that the contribution of these antecedents is much greater at mid-deployment and post-deployment than at pre-deployment. Although the contribution of the two antecedents is significant, the impact of disposition to trust on trust is at the .01 level and hence greater than that of maintenance of rules (at the .05 level). Maintenance of rules can be influenced by the army, which gives it a tool to influence interpersonal trust. Trust needs time to develop, as mentioned above, and therefore the duration of co-operation was included, but this has no influence on trust in any of the three stages.

Table 9. Regression analysis of disposition to trust, maintenance of rules and duration of co-operation on trust at pre-deployment, mid-deployment and post-deployment.

	Bèta at t1	**Bèta at t2**	**Bèta at t3**
Disposition to trust	.334*	.472*	.377*
Maintenance of rules	.164*	.162**	.230*
Duration of co-operation	.108	-.011	.062
R^2	.17	.27	.26

5. Discussion

In this study six units on three deployments were compared. Five units were in Bosnia on two different deployments and one was in Cyprus on one deployment. It was examined how trust among soldiers on a deployment mission develops. It was suggested that trust may follow the same pattern as cohesion in a study by Bartone and Adler (1999), which was an inverted U-pattern, but this is generally not the case. Another suggestion was the U-pattern would be found due to culture shock, as described by Hofstede (1991), but this is not the case either. Trust appears to follow a flat line mainly, i.e. a constant pattern: high trust in the beginning implies high trust halfway during deployment and at the end. Likewise, low trust in the beginning implies low trust halfway during deployment and at the end.

It also appears that trust, assessed by four beliefs, competence belief, predictability belief, honesty belief and benevolence belief, is fairly constant in the order of these four beliefs. The two emotional beliefs, honesty belief and benevolence belief, appear to be more important throughout deployment than the two cognitive beliefs, competence belief and predictability belief as the former are more prominent in the order of the beliefs over all measurements.

How can these different results be explained? In Bosnia there had been a war not so long ago: it had ended in 1995, whereas in Cyprus there had been a conflict that had ended decades ago, long before the soldiers were born, in the sixties (*Landmachtdoctrinepublicatie Deel III, Vredesoperaties*, 1998). Moreover, Cyprus is well-known for being a holiday island.

One deployment in Bosnia, units A and B, does not show differences in trust over time, i.e. trust follows a flat line. This deployment encountered hardly any difficulties, apart from the end of the deployment when tensions grew among the local population and the units needed to work harder than usual and remain on edge. Apparently this did not influence their trust levels. These units had had a fairly quiet mission in which no serious incidents happened and the soldiers could perform their tasks quite well, patrolling the area and getting well acquainted with the local situation. Moreover, during all these months they had got to know each other quite well, even those who originally did not belong to the unit. By their fourth month in the deployment area tensions grew but at that time they knew quite well 'where they stood with each other'. It may be said that the unit and interpersonal relations in the unit were quite well stabilized at that time and the local tensions did not change that. Considering the prominent places benevolence belief and honesty belief hold, it must be concluded that these elements had well developed at that time. This may account for the stability of trust in this mission.

Things were a little different for the second deployment in Bosnia, units C, D and E : again these were units composed of personnel from many different units, like the first deployment in Bosnia, and again most soldiers had not been on a mission before, but during their mission-oriented training, prior to departure for Bosnia, these soldiers knew there were tensions and irregularities in the deployment area. They had to deal with uncertainties about their comrades as they did not all know each other so well at that time, and about the area they were going to as they had not been there before. Units A and B did not encounter these uncertainties as they knew each other and knew the area when the tensions started. When the situation stabilized the second deployment encountered a new stage, an adjustment to their tasks in the area and to life at the base: not only was the area quiet and could they focus on regular patrols without the need to be 'on edge' all the time, but they also spent more time and in a relaxed manner at the base. This may well have influenced soldiers' trust: whereas the first deployment entered the mission in a stable situation which remained so for a long time, the second deployment had to deal with more adjustments, and their trust development had a difficult start and may not have recovered from that. Nevertheless, though the differences in trust are noticeable in this deployment, again the prominence of the emotional beliefs is quite evident in these units.

The soldiers that went to Cyprus (unit F) also knew there could be tensions, but of a different nature. Soldiers were taught about the situation, the neutral zone and how they should work there. They knew they would have to solve problems in the zone between the Turkish and the Greek part, but they also knew that the risk of being caught up in a war was quite low, much lower than in Bosnia, as the war in Bosnia had only ended so recently and was so fresh in everybody's memory. They had to work quite independently, which may have caused their competence belief to increase during deployment. It also decreased towards the end of the deployment, though, perhaps because by that time they knew what their fellow soldiers were capable of and expectations may have been a little too high. Soldiers also learned about the strictness of the British rules, which was incomprehensible for many of them and a reason to turn to their fellow soldiers, preferably not the British. In unit F there is a prominent role for the emotional beliefs at pre- and post-deployment.

Overall, throughout deployments emotional beliefs prevail over cognitive beliefs. This would imply that, though trust is assessed by both emotional and cognitive beliefs, it is mainly an emotional matter. This raises the question of how an organization like the army can promote trust. Perhaps maintenance of rules can contribute to this. It appears to be an

antecedent of trust throughout deployment, though the results demonstrate that its influence is smaller than that of disposition to trust. If leaders consistently maintain the rules for all personnel, they notice that trustworthy behavior is rewarded and they trust their colleagues more than if rules were not maintained even-handedly. This refers to cognitive elements, but also to emotional elements.

Interviews during deployment might have provided information on the way officers and non-commissioned officers maintained rules among their personnel. Now, interviews were conducted after the deployments were over. Disposition to trust usually has the same pattern as trust. This implies that disposition to trust is subject to change, contrary to findings in other studies, in which disposition to trust is believed to be stable (Mayer et al., 1995; Costa, 2000). This raises the question of what influences the disposition to trust. As an example may serve units D and E where disposition to trust decreases and trust decreases at the same time. However, does a decrease in trust from pre-deployment cause a decrease in disposition to trust at mid-deployment? If that were the case, trust at pre-deployment would be an antecedent of disposition to trust at mid-deployment, whereas data from previous studies have shown that disposition to trust is an antecedent of trust. Further studies into the pattern of disposition to trust should give more insight into the reason why disposition to trust changes.

It has been suggested in the theory that trust formation needs time, but the duration of co-operation does not influence trust development, a finding in line with a previous finding on duration of co-operation between soldiers and their platoon commander and their trust in the platoon commander (Van der Kloet, Van Schuur, Sanders, 2001). Time is needed to form trust However, it is not time but other elements that actually contribute tot trust.

6. Conclusions and recommendations

In the introduction to this chapter the vulnerability of trust and a breach of trust was mentioned, and the present study suggests that both circumstances and the extent to which soldiers know each other influence trust. Moreover, trust is assessed by emotions rather than by cognition. The three deployments differ from each other in trust development: neither the first Bosnia deployment nor the Cyprus deployment show drastic changes in trust

development. They are, however, found in the second deployment to Bosnia, supposedly due to the circumstances soldiers had to deal with in Bosnia and of which they knew in advance without having been in the deployment area before. This suggests that uncertainties about upcoming missions and the consequences for trust development are most drastic in new situations in an already familiar deployment area such as Bosnia, or in new missions. With regard to the latter, the first Dutch participation in Iraq after the war ended in 2003 comes to mind. The three key factors seem to be that (1) soldiers do not know the area and that (2) the situation they enter into is different from what their predecessors encountered when they first arrived in the deployment area, and that (3) they have not sufficiently practiced with each other to get to know each other well, especially at the emotional level. These are likely fundamental criteria for trust development.

The results of this study further imply that trust can generally be considered a fairly consistent, stable but rather emotional aspect in existing interpersonal relations, but it also indicates that situations do contribute to trust development: one may be personally prepared, but if interpersonal relations are relatively new and if irregularities are expected, this increases uncertainty and it influences trust. These situations should be studied more closely in both a survey and simultaneous interviews on the spot as interviews, as well as participating observation, are likely to support findings in questionnaires. This is a first recommendation for further study. Disposition to trust influences trust, a finding in line with previous findings (e.g. Van der Kloet et al., 2001). Moreover, development of disposition to trust follows the same pattern as trust development, but it remains unclear what influences disposition to trust, as it can evidently be influenced. The second recommendation is to further study the influences on the disposition to trust. Consistent maintenance of rules gives soldiers an indication of support for trustworthy behavior by unit command and works as an incentive for them to trust their colleagues. The questionnaire implies more or less how rules were maintained, but it is recommended to interview servicemen on the spot to gather information about the way rules are maintained (recommendation three). The fourth recommendation is that a new study had better cover a larger number of soldiers. Unit C had a small number at post-deployment and there was quite some non-response for the items concerning maintenance of rules at post-deployment.

Good preparation for a mission is absolutely necessary and perhaps a bit more could be done than is already being done in the Netherlands Army. As it is now, information to a battalion about to be deployed is passed on by the Operational Staff of the Netherlands Army.

This is not surprising, since this body has a lot of knowledge about the deployments: it provides information in advance, monitors every unit during deployment and evaluates every deployment, and hence it has a lot of lessons learned at its disposal. The unit that is about to return from deployment also has a lot of recent information about the deployment, information the next unit could learn from. A suggestion is that the unit about to come home sends a small advance party of an officer, a few non-commissioned officers and soldiers from the deployment area home to inform the upcoming unit directly and extensively about the mission and what is going on in the area The only problem here is that "myths" about the passed deployment are passed on from one deployment to another and will lead a life of their own (Soeters & Moelker, 2003). It is therefore advisable to let these servicemen from the most recent deployment pass on their information to the next unit, in combination with staff members of the Operational Staff, who have a broader view on deployments in general. This is likely to reduce uncertainty among the newcomers, because up-to-date information as well as general information about deployments is supplied.

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Chapter 3. The Effect of Leadership Style in Potentially Risky Situations on Soldiers' Trust[22]

1. Introduction

The tasks and organization of the Royal Netherlands Army (RNLA) have considerably changed since the East Bloc fell apart by the end of the eighties of the previous century. Instead of focusing on Northern Germany as theater of operations, the RNLA now primarily focuses on military operations other than war (MOOTW), such as peace-enforcing, peace-keeping and humanitarian operations, often with international allies[23]. The RNLA has been reduced to about one third of its Cold War size, and after abolishing conscription in 1995 it became an all-volunteer army. These are fundamental changes causing changes in training programs, as military operations other than war cover a much wider field than the peace-enforcing operations the army trained for in the Cold War period. The duration of training for army officers has, however, not changed, even more training goals need to be achieved in the same amount of time.

These changes have affected military personnel's required attitudes as their operations have changed from relatively static (Northern Germany) to more varied all over the world and under various circumstances. This is all quite demanding for commanders and subordinates. The different circumstances in which such operations take place demand that commanders co-operate well with their subordinates. One of the characteristics of this co-operation is that commanders and their subordinates operate quite independently. Commanders receive orders that should be carried out, but they are relatively free to choose the way in which they carry out these orders as they know the situation in which the orders should be carried out best, and this includes possibilities and threats[24]. More independent operations strongly decrease the possibility for superior commanders to monitor subordinates' actions and thus call for more

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[23] The so-called combined operations, see footnote 19.

[24] This is called mission-oriented command. Commanders set the goals for their subordinate commanders but the way in which these goals are achieved is left to the discretion of the subordinate commanders.

trust on the part of superiors in their subordinates. Moreover, operations in remote areas, where units are more or less isolated from other units, make that subordinates within those units are more dependent upon their unit commanders. The success of an operation depends to a certain extent on subordinates' trust in their superiors, calling for ways for superiors to invoke this trust. Trust is one of the pillars of good leadership, along with knowledge and power(Zand, 1997), a pillar to which the RNLA attaches much importance (*Militaire Doctrine,* 1996). Along with leadership style, the circumstances in which a unit operates are likely to influence trust for a leader may need to adapt his leadership style to different circumstances whereas army training, not surprisingly, focuses on dangerous circumstances.

Two kinds of circumstances are focused on in this chapter: high risk situations and low risk situations. In high risk situations a task-oriented leadership style seems more appropriate because this situation requires quick decisions focused on the task (Yukl, 2002). In low risk situations a relationship-oriented leadership style seems more appropriate because the low need for alertness allows time to build up a better personal understanding with the personnel (Hunt & Phillips, 1991). The central research question in this chapter is:

Is there is a connection between potential risks, leadership style and subordinates' trust and how can this connection be explained?

The chapter is structured as follows: In paragraph two the theory is discussed and the hypotheses are derived, to be followed by the explanation of the methodology in paragraph three. The results are reported in paragraph four whereas paragraph five contains the discussion, conclusions and recommendations.

2. Theory

The platoon. As object of research the platoon was taken as it is the lowest level that can act relatively independently. With the focus on platoon commanders and their subordinates there are two nested levels of research units: the lowest level (the subordinates) who are expected to trust their commander to a greater degree. Trust is measured on their level, it may vary from subordinate to subordinate within the same platoon. As the platoon commander is the one applying a leadership style, leadership style is on his level, the higher level. As potential risks apply to all platoon members, this is on the level of the platoon commander as well: neither leadership style nor potential risks will vary over the subordinates within the same platoon as

the platoon commander will aim to turn his platoon into a unit with a single way of thinking and acting, so differences in leadership style *between* platoons will be bigger than *within* platoons. The study aims at operational platoons, where basic training and specialist training have been completed. In general, subordinates in these platoons have known their platoon commander for at least three months, which is approximately the period soldiers need to get accustomed to working in their platoon (Van de Ven, 1998-2003).

Leadership style and potential risks. When leadership style is concerned a distinction is made between leadership style in the field, with often high potential risks, and leadership style in other situations, which shall be referred to as barracks situations, with low potential risks (Hunt & Phillips, 1991). According to Hunt and Phillips (1991), task-oriented leadership would be more appropriate in field situations and relation-oriented leadership would be more appropriate in barracks-situations. In situations of high potential risks there is no time for discussion about the best way to handle the situation. The leader, being responsible for the group, is the one making decisions about the group's task. This task-oriented leadership style is expected to positively affect subordinates in situations of high potential risks such as crisis situations and battle circumstances (Yukl, 2002).

A leader applies a relation-oriented leadership style by taking time for personal attention to his subordinates and supporting them, inquiring after work progress or personal circumstances. Relation-oriented leadership is more supportive than task-oriented leadership, and may also involve a more participatory character. This leadership style applies better in situations of low potential risks such as barracks situations where there is time for discussion. The focus on both leadership styles is important because army personnel finds itself in both situations, not only in high potential risk situations, but the main focus of army training is on situations of high potential risks. Both leadership styles contain interaction between leader and subordinates, but in a task-oriented leadership style interaction is expected to be brief, uni-directional and mainly concerns work, whereas in a relation-oriented leadership style interaction will be bi-directional and may involve personal matters.

The literature shows some effects of leadership style in situations of high potential risks. Within the German Wehrmacht cohesion was strong when officers were an example, behavior-wise, to their men (Shils & Janowitz, 1949). They went up front in the battle, and had to be stronger and more persistent in fighting than their men, this type of behavior is typically task-oriented. Findings from studies in the U.S. Army in Vietnam show that group cohesion is low if officers send their units on patrol with a non-commissioned officer and stay behind in

base camp themselves, but that cohesion is stronger if officers actually participate themselves in these patrols (Gabriel & Savage, 1976). However, none of these studies deals with the connection between leadership style and subordinates' trust. Only one such study was found, in a gypsum factory (Gouldner, 1954). One part of the factory workers worked in the mine, the other part in the office, so a distinction could easily be made between high risk (mine) and low risk (office) situations. By applying one (task-oriented) leadership style to all categories of personnel, trust among those working in the office was negatively affected, whereas trust among those working in the mine was positively affected. Although a connection was made in this study between leadership style, trust and potential risks, it only concerns the task-oriented leadership style, whereas the focus of this study will be on both a task-oriented and a relation-oriented leadership style in various situations of potential risks.

Trust. A person beginning to trust others takes a vulnerable position, and in doing so he assumes others will not take advantage of this vulnerability if they have the opportunity to do so. The more often interaction has taken place, the better one can judge if others will indeed take advantage of this vulnerability, and a 'shadow of the past' is formed (Batenburg, Raub & Snijders, 1999). This shadow of the past enables a person to make assumptions about another person's trustworthiness, logically trust may then emerge and increase or decrease, or it may not emerge at all. Not only the past but also the prospect of having to deal with others in the nearby future plays a part. In the prospect of having to co-operate with other soldiers for quite a while, a soldier may refrain from opportunistic behavior – taking advantage of others – for fear of retaliation, as a lengthy co-operation provides ample opportunity for other soldiers to retaliate. This shadow of the future may influence trustworthy behavior positively. Moreover, skill, honesty and openness are regarded as important elements for trust (Mishra, 1996; Boon & Holmes, 1991). Among military personnel in platoons, both the shadow of the past and the shadow of the future occur: soldiers in the RNLA generally sign a two and a half year contract, with the possibility of extending the contract. After basic and specialist training, covering about half a year, a soldier is placed in a platoon and has the prospect of working for some two years with his colleagues and his platoon commander, whereas a soldier having served in the platoon for some time is logically more subject to 'the shadow of the past' and thereby is facing reposting and having to leave the army soon. During their co-operation in the platoon, soldiers get to know one another and their platoon commander better, both on a professional and a personal level. The more soldiers show that they regard other people's well-being equally important as that of their own, the more they are likely to trust each other. Likewise, if they do

not abuse their comrades' openness, like when they are entrusted with information, they will more likely trust each other. There will, however, be differences in the extent to which soldiers trust each other from scratch: some soldiers generally have low trust in others whereas others generally have high trust in other people. If after some time trust has emerged, soldiers who are more disposed to trusting others will have more trust in other soldiers as opposed to those who are not as trusting. This 'disposition to trust' is seen as a situation-independent characteristic that is basic for trust in others (McKnight, Cummings & Chervany, 1998).

Within their platoons, platoon commanders are first and foremost responsible for their personnel's well-being, and in turn the personnel is highly dependent upon their platoon commander as platoon commanders in situations of high potential risks with their platoons need to take decisions that affect the lives of their subordinates. Platoon commanders who use a task-oriented leadership style and who know what to do in dangerous situations show skill, and will thus invoke trust among their subordinates. In other situations - low potential risks - the platoon-commander's relation-oriented leadership style, in which he pays attention to his personnel and supports them, is expected to invoke their trust. Referring to the RNLA and situations that platoons may find themselves in, the following hypothesis is formulated:

The more the platoon-commander applies a task-oriented leadership-style in a field-operation, the more subordinates will trust their platoon commander (hypothesis 1). However, it has already been mentioned that platoons do not always find themselves in situations of high damage potential, hence the following hypothesis can be formulated for situations of low damage potential:

The more the platoon-commander applies a relation-oriented leadership style in the barracks, the more subordinates will trust their platoon commander (hypothesis 2).

A number of other aspects that may play a part in the connection between potential risks, leadership style and trust in the platoon commander have been taken into account as well. The first two aspects are characteristics of the platoon commander, the other aspects pertain to the subordinates or the interaction between the platoon commander and his subordinates.

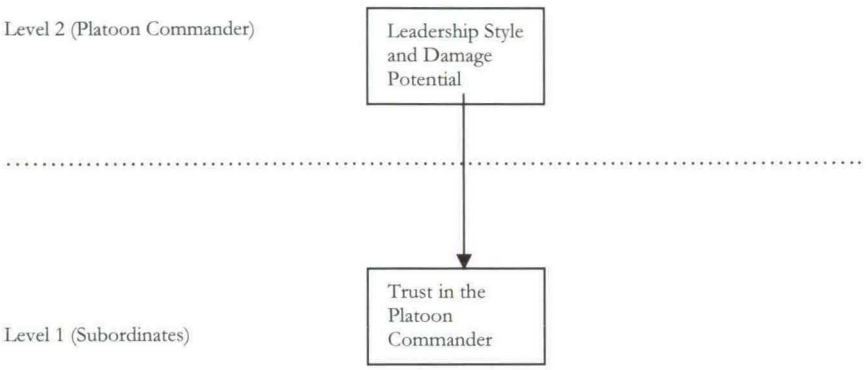
The first aspect is the initial function a lieutenant gets after completing his education and training at the Royal Netherlands Military Academy, that of platoon commander. Newly assigned platoon commanders may have had leadership experience prior to their Academy training as a non-commissioned officer and therefore may be expected to master interpersonal relationships better and know better how to invoke trust among their subordinates. The second aspect is the platoon commander's age. A young platoon commander could be regarded as a beginner, with only officer training experience, whereas an older platoon

commander is expected to master skills in dealing with people due to experience. Subordinates may be assumed to wait and see before they begin to trust a "fresh" platoon commander.

The next aspect is a characteristic of subordinates, namely trust in general, also called disposition to trust. A person with high disposition to trust has a basis for trust in the platoon commander and from there on, trust in the platoon commander will or will not develop. It is therefore only logical to assume that a high disposition to trust facilitates trust easier and generates high trust in the platoon commander.

The last three aspects are characteristics of the relationship between a subordinate and the platoon commander. First of all there is the amount of time that subordinates have known their platoon commander. As they know their platoon commander longer, they know better what he is capable of. This may become obvious in the way the platoon commander deals with and takes care of subordinates. Better knowledge may lead to higher trust or lower trust. The effect of duration of co-operation is examined in the sense that better knowledge is expected to lead to higher trust. Second, the experiences subordinates have had with the platoon commander, for example platoon commander who are more or less open towards their subordinates, or who look after work-related safety matters for the platoon. These aspects are related to a general concern by the platoon commander for the platoon and may lead to higher trust by subordinates. They are also related to the platoon's work environment and day-to-day activities. Last is the frequency with which subordinates interact with their platoon commander, found in their housing situation. Military personnel stationed far away from home often lives on base during the week. It may be expected that those who live on base will interact with their platoon commander more frequently than those going home every day, as platoon commanders often work overtime and can thus be found in the barracks. More frequent interaction may involve more trust, also because this interaction at off-duty hours is expected to be more on a voluntary basis. Those who live on base may trust their platoon commander more than soldiers who live off-base, however the reverse may also occur if those living on base do not interact with the platoon commander, perhaps because they do not trust him. This aspect is included to examine if a positive effect on trust can be found. The research model is as follows:

Figure 3: The research model of the effect of leadership style in potentially risky situations on soldiers' trust.



3. Methodology

The data for this study were collected in 1999 among 12 platoons and their platoon commanders in the Royal Netherlands Army.

Respondents. All platoons in this study belong to operational units from various battalions and companies. Each platoon consisted of sergeants, corporals and soldiers, and the total number of respondents was 186: 185 men and one woman. For the analysis no distinction was made between sergeants, soldiers and corporals as the platoon commander's leadership style for the entire platoon applies to sergeants, corporals and soldiers fairly evenly. A number of sergeants, three percent of the respondents, had a long-term contract, and 97% had a short-term contract[25]. All twelve platoon commanders were male. One platoon commander was an elderly warrant officer, one was a young sergeant, all the others were lieutenants. Some respondents had been sent abroad whereas others had not.

Questionnaires. Two fictitious situations were presented in the questionnaires[26]. An example of the items for task-oriented leadership is "He gives directions how to solve the situation" with answering categories 2 = yes, he will do that, 1 = no, he will not do that or 0 = I don't know. To the high potential risk situation questions about task-oriented leadership were attached (Fleishman, 1969). To the low potential risk situation questions about relation-oriented

[25] A lifetime contract in the RNLA is a contract where one signs up to be in the military for life, until retirement. A temporary contract is a contract where one signs up for a limited number of years, and then returns to civilian life.
[26]The questionnaires can be found in appendix E.

leadership were attached (Fleishman, 1969). An example of the items for the relation-oriented leadership is "He gives a compliment to someone who works well" with the same answering categories as those for task-oriented leadership. The Specific Interpersonal Trust Scale by Johnson-George and Swap was used as a basis for the questions about trust in the platoon commander, as this questionnaire deals with one person's trust in a specific other person (Johnson-George & Swap, 1982). An example of an item in this questionnaire is "If the platoon commander promises me something, I am sure he will stick to that promise" with answering categories 2 = true, 1 = not true and 0 = do not know. For disposition to trust the Interpersonal Trust Scale by Rotter was used (Rotter, 1991). An example of an item is "Never trust strangers" with the same answering categories as those for trust in the platoon commander. The experiences with the platoon commander as mentioned (striving for team spirit, looking after safety in the workplace) were derived from personal experiences of the main author of this chapter and from her colleagues. An example of the items in this questionnaire is "He lets the interests of the platoon come in the first place" with the same answering categories as those for trust in the platoon commander. The questionnaire further included demographic questions, and concluded with three questions concerning the extent to which respondents thought the situations presented were dangerous. The platoon commanders were given the same questionnaires as their subordinates. Apart from the demographic questions all questions had two answering categories, true and not true, to make it easier to distinguish sharply between leadership styles.

Response. 205 questionnaires were handed out group-wise in the presence of the researcher. Of the 205 questionnaires, 186 were returned, two others were returned blank, and the remaining 17 were not returned at all. The number of participants who did not respond was 9%, quite low. With the questionnaires themselves there was also some non-response with regard to the individual items, as a result of which the number of respondents in the various analyses varies from 136 to 186.

Scaling analyses. In order to test reliability, Mokken Scale analysis was used (Mokken, 1971). The Mokken scale analysis is a bottom-up procedure, in which per analysis items are added[27]. The Mokken scale analysis very much resembles a Guttman sclae. There are two levels of analysis,

[27] The following scale results were obtained from Mokken scale analysis: Task-oriented leadership: four item scale, out of 14 items (H=0.38, n=186). Relation-oriented leadership: six item scale, out of 10 items (H=0.37, n=186). Trust in the platoon-commander: seven item scale, out of eight items (H=0.46, n=186). Trust in general: three item scale, out of five items (H=0.40, n=186). Experiences with the platoon commander: seven item scale, out of 10 items (H=0.41, n=174). The scales can be found in Appendix E.

the level of the subordinates and the level of the platoon commanders. For trust, disposition to trust and experiences with the platoon commander the respective items were scaled using the subordinates' items. For leadership styles a different procedure was followed. The items concerning leadership style were submitted to both the platoon commanders and their subordinates. Now the items needed to be scaled, but for the scaling procedure a substantial number of questionnaires was needed to attain reliability. The number of platoon commanders was too small for this and therefore the items from the subordinates concerning leadership styles were subjected to a scaling procedure. The items that were included in the scale could thus be regarded a reliable scale. As the platoon commanders had been given the same items concerning leadership style as the subordinates, the replies of the platoon commanders to those items included in the scales were used for further analysis to examine which leadership style was used by platoon commanders. As such, there was a reliable scale for leadership styles as the procedure was done with 186 respondents, and the scale was valid as well as the replies of the platoon commanders. This procedure also reflects the two levels in this study, which is the reason why multilevel analysis was used for most of the analyses (Snijders& Bosker, 1999).

4. Results

The 12 platoons varied in size between 6 and 26 persons. The 186 subordinates varied in age between 19 and 31 years. Table 10 gives an overview of the main demographic data per platoon. In order to examine if trust in platoon commanders varied between platoons, a variance analysis was performed using SPSS. There appear to be significant differences between the platoons with regard to trust in the platoon commander ($F = 6.43$, $df_1=11$, $df_2=174$, $p < .01$).

For the remaining data analysis Multilevel for Windows 1.0 (MLWin) was used[28]. Since the differences in platoon size were substantial, platoon size was included as a fixed variable (Snijders & Bosker, 1999). At first, platoon size appeared to impact trust in the platoon commander. Trust decreased as platoon size increased. In the remaining analyses, platoon size was held constant in order to avoid its influence on the other results.

[28] The method of Restricted Iterated Generalized Least Squares (RIGLS) was applied, which is more appropriate in analyses with fewer than 30 groups (platoons) than the usual option of Iterated Generalized Least Squares (IGLS). In the RIGLS method in the random intercept model the results of the t-tests are specifically important, whereas in the

A positive significant effect (1.18 / .62 = 1.90) of task-oriented leadership of the platoon commander in a field situation was found as a result of which it can be concluded that task-oriented leadership under high risk situations does influence trust in the platoon commander. Relation-oriented leadership in the barracks does not influence trust in the platoon commander (.22 / .36 = .61, n.s.) as a result of which relation-oriented leadership in the barracks was taken out of the model (Table 11).

Next, the control variables were added to the model step by step with only task-oriented leadership in the field as predictor and platoon size was held constant. First the platoon commander's initial function was added, then the platoon commander's age, then disposition to trust, the amount of time that subordinates had known their platoon commander, experiences subordinates had with their platoon commander and last housing situation of subordinates. The starting post, combined with platoon size and task-oriented leadership, had no effect on trust in the platoon commander (-.48 / .57 = -.84) whereas the platoon commander's age had no effect either (.01 / .04 = .25).

IGLS method in the random intercept model the deviances are important as well.

Table 10: Demographic Data of the Platoons

Platoon number	Starting post of platoon commander	Platoon commander's age (in years)	Average subordinates' age in years	Number of subordinates per platoon	Number of males / females per platoon	Average duration that they know platoon commander (in months)	Most common school education** (apart from platoon commander)	Number of NCO's / corporals and soldiers per platoon	Housing situation (on-base or elsewhere)
1	Yes	26	24	15	15 / 0	14	Lower vocational / advanced elementary	0 / 15	14 on-base*
2	Yes	29	23	26	26 / 0	16	Lower vocational / advanced elementary	3 / 23	15 on-base 9 elsewhere*
3	Yes	33	24	18	18 / 0	13	Lower vocational / advanced elementary	0 / 18	12 on-base 5 elsewhere*
4	No	30	23	21	21 / 0	19	Lower vocational / advanced elementary	2 / 19	11 on-base 5 elsewhere*
5	No	31	23	22	22 / 0	16	Lower vocational / advanced elementary	5 / 17	11 on-base 10 elsewhere*
6	No	26	23	21	21 / 0	11	Lower vocational / advanced elementary	3 / 18	14 on-base 5 elsewhere*
7	No	24	23	11	11 / 0	14	Lower vocational / advanced elementary	0 / 11	6 on-base 5 elsewhere
8	No	31	27	6	6 / 0	12	Lower vocational / advanced elementary	3 / 3	3 on-base 3 elsewhere
9	No	34	23	15	15 / 0	7	Lower vocational / advanced elementary	0 / 15	13 on-base 1 elsewhere*
10	No	24	23	10	10 / 0	15	Lower vocational / advanced elementary	1 / 9	8 on-base 2 elsewhere
11	No	50	23	7	6 / 1	33	Lower vocational / advanced elementary	0 / 7	4 on-base 3 elsewhere
12	Yes	28	24	14	14 / 0	6	Lower vocational / advanced elementary	4 / 10	11 on-base 3 elsewhere

*: Some did not answer this question. By the way, sometimes military personnel that stays on-base will spend one or two nights per week elsewhere.

**: 25% had done advanced elementary education, 23% had done lower vocational education

Table 11: The effect of task-oriented leadership in the field and relation-oriented leadership in the barracks on trust in the platoon commander. (n=186)

	Empty model		Platoon size		Platoon size with task-oriented leadership		Platoon size with task-oriented leadership and relation-oriented leadership	
Fixed effect	coeff	(S.E.)	coeff	(S.E.)	coeff	(S.E.)	coeff	(S.E.)
γ_{00} = intercept	12.22	(.29)	13.63	(.74)	13.84	(.68)	13.15	(1.35)
γ_{01} = platoon size			-.09	(.05)	-.12	(.04)	-.12	(.04)
γ_{02} = task-oriented leadership in the field					1.18	(.62)	1.17	(.67)
γ_{03} = relation-oriented leadership in the barracks							.22	(.36)
Random effect	Variance	(S.E.)	Variance	(S.E.)	Variance	(S.E.)	Variance	(S.E.)
Level two variance: τ^2_0 = var (U_{0j})	.79	(.41)	.58	(.32)	.42	(.25)	.46	(.27)
Level one variance: σ^2 = var (R_{ij})	2.75	(.30)	2.75	(.30)	2.75	(.30)	2.75	(.30)
Deviance	735.10		730.99		727.28		727.14	

Table 12. The random-intercept model with the effect of platoon size as a fixed effect, with task-oriented leadership by the platoon commander in the field and first only starting post, next the platoon commander's age, and finally only disposition to trust. (n=186).

	Platoon size with task-oriented leadership and starting post		Platoon size with task-oriented leadership and age		Platoon size with task-oriented leadership and disposition to trust	
Fixed effect	coeff	(S.E.)	coeff	(S.E.)	coeff	(S.E.)
γ_{00} = intercept	13.84	(.68)	13.53	(1.55)	13.10	(.70)
γ_{01} = platoon size	-.10	(.05)	-.12	(.05)	-.11	(.04)
γ_{02} = task-oriented leadership in the field	.83	(.75)	1.18	(.66)	1.09	(.61)
γ_{03} = starting post	-.48	(.57)				
γ_{04} = platoon commander's age			.01	(.04)		
γ_{05} = disposition to trust					.42	(.13)
Random effect	variance	(S.E.)	variance	(S.E.)	variance	(S.E.)
Level two variance: τ^2_0 = var (U_0)	.43	(.26)	.48	(.28)	.41	(.24)
Level one variance: σ^2 = var (R_{ij})	2.80	(.30)	2.80	(.30)	2.60	(.28)
Deviance	726.61		727.54		716.24	

On the other hand, disposition to trust seems to have a significant effect on trust in the platoon commander (.42 / .13 = 3.23). The higher disposition to trust, the higher trust in the platoon commander (table 12). The amount of time that subordinates had known their platoon commander had no effect on trust in the platoon commander (.01 / .02 = .50). The experiences however, such as being open to subordinates and looking after safety in the workplace, had great impact on trust in the platoon commander, as the t-test yields a 10.6 (.53 / .05). When the effect of the housing situation of subordinates was examined no effect was found. If subordinates know their platoon commander better because they live on base, that does not bear effect on trust in their platoon commander.

Finally the extent to which the respondents judge the situations as dangerous was examined. A t-test reveals a statistic significant difference for two out of three items[29]. Still, 10% of the subordinates looked upon the barracks situation as dangerous, and only 30% considered the field situation as dangerous, however the overwhelming majority of the respondents looked upon neither situation as dangerous. The statement "everybody should take extra care that they are not hurt" is confirmed in the barracks situation by 22%, against 73% in the field situation. The majority of the respondents agreed that great care should be exercised in the field situation.

5. Discussion, conclusions and recommendations

In this study the connection between potential risks, leadership style and subordinates' trust in platoon commanders was examined. Task-oriented leadership in situations of high potential risks situations appeared to generate trust in the platoon commander. This is not really surprising since soldiers learn from the beginning of basic training that the task must be fulfilled at all times. It is a process of internalization that becomes a guiding principle through their entire military training and military life. A leader responding to this expectation is likely to reflect soldiers' drills and invoke trust. This finding corroborates a previous finding on the effect of task-oriented leadership (Gouldner, 1954) and further specifies findings of

[29] The items were the following: This situation is dangerous for all involved (average barracks situation .10, (s.d. .30), average field situation .30, (s.d. .46) t=5.35); This situations makes everyone feel tense (average barracks situation .53, (s.d. .50), average field situation .52, (s.d. .80), t=.17); Everyone should be aware that nothing happens to him (average barracks situation .22, (s.d. .41), average field situation .73, (s.d. .99), t=6.80).

appreciation of task-oriented leadership in situations of high potential risks (Kerr, Schriesheim, Murphy & Stogdill, 1974). Leaders, also future leaders such as officer-cadets, should focus on good task-fulfillment. This is already an important part of the officers' training, but the specific skills for arms and services now have to be mastered in six months, whereas this used to be one year. It is strongly recommended that, to keep up the task-oriented skills, this training time is not reduced any further but rather the opposite, extended with a few months.

Relation-oriented leadership in situations of low potential risks does not generate trust in platoon commanders. This may imply that subordinates find task-oriented behavior more important than relation-oriented behavior. Aspects such as the platoon commander's initial function, age or the time that the platoon commander has worked with the subordinates does not influence subordinates' trust in the platoon commander. Moreover, there does not seem to be a difference between subordinates who live off-base and those who stay at the barracks during the week, where they are likely to meet the platoon commander. Though this research has mainly focused on leadership styles and trust, the length of co-operation and the stay in the barracks were added purely as explorative aspects. However, it is recommended that they are left out.

Other influences on trust in the platoon commander are the disposition to trust and the experiences subordinates have had with the platoon commander. The effect of disposition to trust is not surprising as it has been found in previous studies (see also McKnight, Cummings & Chervany, 1998). Disposition to trust cannot be influenced as it is a personal characteristic.

The experiences subordinates have had with the platoon commander pertain to the platoon commander's general behavior such as looking after a safe workplace, complimenting a subordinate on a good job, promoting team spirit within the platoon. These experiences demand special attention as it is important for platoon commanders to realize that their subordinates pay attention to all these supposedly small details in day-to-day activities and that this helps to shape their trust in the platoon commander. For the army, and especially army training, these experiences are important, recognizing the fact that these experiences can occur anywhere, in the barracks as well as the field, and units often find themselves in the barracks. Yet many training situations pertain to field situations and these experiences indicate that situations in the barracks can contribute to trust in the platoon commander as well, but quite often this is not included in army training, again likely due to a limited training time for arms and services. As said at the beginning of this chapter, more aspects need to be trained these

days than during the Cold War period, but the total amount of training time has not changed. Officer-cadets get a bit of everything in their training, but more training time would give more opportunity to go deeply into all skills and drills. Again it is strongly recommended that training time is not reduced but even extended with a few months.

The study ends with some comments. First, as the items to be used for the questionnaires were derived from English questionnaires, these had to be translated into Dutch. Subsequently, a 'translation' towards a military situation needed to be made. This may have negatively affected the validity of some items. Second, the scales for the leadership styles have become quite small. For even more reliable results it is advisable to use a larger scale.

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Chapter 4. Consideration, Compliance and Communication: Their Impact on Commanders' Trust[30].

1. Introduction

In their management, supervisors in an organization give directions how goals must be attained. Management encompasses working with and through individuals and groups to accomplish organizational goals (see Hersey & Blanchard, 1977), by planning, motivating, organizing and control. All together, management refers to the way in which superior levels within an organization give directions to lower levels and individuals within the organization, and how they plan, motivate, organize and control organizational activities to accomplish organizational goals. This is also the way in which management is addressed in this study.

One precondition for attaining organizational goals is trust within the organization (Fukuyama, 1995; Smets, Wels & Van Loon, 1997; Gambetta, 2000; Tyler, 2001). Trust is necessary because the absence of trust would require managers to consistently monitor their employees' activities, which is an expensive and almost impossible activity (Miller, 2001; Yukl, 2002). Hence, superiors need to trust their employees for the performance of organizational activities, and by trusting them, they depend on their goodwill, a goodwill that, in turn, has been found to be linked to employees' trust in their superiors (Tyler & Degoey, 1996). As such, trust seems reciprocal: if superiors display trust in their management towards employees, employees show their goodwill connected with trust in the superiors. The question arises, where employees' trust springs from. According to Tyler (2001) it springs from superior levels' care about their employees. This care by superior levels could be seen as consideration for employees and a positive intent. It may then be suggested that considerate management and trust are essential for an organization. This may be especially true for an organization in crisis situations or in situations of drastic changes, like downsizing or changes in organizational goals. Weick and Suthcliffe (2001) argue that organizations need to rely on their personnel in unexpected situations, situations that can hardly be trained for. This reliance may depend upon

[30] The authors of this chapter are Irene E. van der Kloet, Karin Sanders and Joseph L. Soeters. The chapter will be submitted as an article to the Journal of Management and Governance.

trust in the organization, so that each member will perform to the best of his abilities to reduce hazard as much as possible, should a dangerous situation occur. Considerate management would ensure that the employees' interests are taken into account and would cause employees to trust their superior levels.

The next question is if considerate management and trust are sufficient to achieve organizational goals. Would it not be so that organizations apply certain rules and procedures that employees should follow in order to get where they need to be? How else would employees know what needs to be done and how it should be done? This would call for a set of rules, but also for some control system, as without a control system, employees could do as preferred and no correction would take place, resulting in, possibly, poor organizational outcomes. This would imply that organizations need to set rules and procedures for their employees, but also that they need to trust that employees perform these tasks because full control over employees' behavior is an almost impossible task (Miller, 2001). In order to make themselves trustworthy, superior levels in the organization may need to be consistent in maintaining rules. Suppose that superior levels want to be consistent in their management, how would employees know about it? And how could superior levels know if their employees trust them? This would have to be communicated within the organization, for example personally, by telephone, by documents or by email. By these means, rules and procedures can be explained to employees so they get an understanding about what is expected of them and what their discretionary powers are. Should the opportunity be given for feedback, this interaction seems a fertile base for trust to arise (Luhmann, 1979), as feedback also gives superiors the opportunity to learn from their employees. This seems self-evident, but the role of communication is likely essential for management and trust (Sarbaugh-Thompson & Feldman, 1998).

Where the relationship is laid between trust in higher levels in the organization, considerate management, consistency in rule maintenance and communication, it is not exactly clear how these three aspects relate to each other. The understanding of this relationship is important because it could help organizations to enhance employees' trust in the organization. Hence, the central question in this study is: ***How do considerate management and compliance with organizational rules influence trust in higher levels within the organization and what is the role of communication in this connection?***

In this chapter it is the intention to study these interrelations more deeply. Object of study is the Royal Netherlands Army (RNLA)[31]. The army regards intensive and open communication as necessary preconditions for trust in the future functioning of the army (*Defensiekrant*, January 10, 2002). The RNLA is continuously changing and downsizing its organization. This process of reorganization and downsizing has been taking place since the end of the Cold War in 1990 (*Landmacht Doctrine Publicatie I,* 1996)[32]. Reorganization and downsizing cause uncertainties for the personnel and involve continuous changes in management. In the slipstream of continuous downsizing, management as well as trust and communication may be influenced.

2. Theoretical elaboration

Trust entails the risk an individual willingly runs of being harmed by another person's behavior, in the belief that the other person will not take advantage of the opportunity to do so (e.g Baier, 1986; Rousseau, Sitkin, Burt & Camerer, 1998). Moreover, the other person's behavior cannot be controlled by the trustor, hence a trustor leaves his fate in the hands of a trustee, which will make a trustor vulnerable (Mayer, Davis & Schoorman, 1995). After all, the trustee can do whatever seems most attractive to him, as the trustor has lost control.

Trust can be examined at various levels, like the individual (co-workers') level or organizational level. In co-workers' trust, the co-worker's competence, predictability, honesty and benevolence are at stake, dividing trust into a cognitive (competence and predictability) and an emotional (honesty and benevolence) component (McKnight, Cummings and Chervany, 1998). When trust in the superior level within the organization is concerned, these

[31] In 2001 the newly appointed commander in chief of the RNLA concluded that commanders encountered difficulties executing their tasks according to the rules and procedures set in management. As far as the Commander in Chief could observe, sometimes commanders did not follow the rules and procedures, hence tasks were carried out in different ways between different units, which impaired consistency, and transparency in procedures. In his view this frustrated the organization, on the other hand, if rules are not followed, one may wonder what is wrong with them. How commanders felt about management was studied, what their problems were in this connection and what recommendations they had for improvement. As the roles of trust and communication were seen as indispensable for management, these aspects were included in the research.

[32] Changes have taken place since 1990. In 1991, the government presented the *Defensienota* (Defense Act) 1991, in which the matrix structure within the Defense Department was abandoned and reductions were announced. In 1993, the *Defensienota 1991* was adapted, resulting in the *Prioriteitennota 1993*. Subsequently, het *Beleid Bedrijfsvoering Defensie 1993* was introduced, in which corporate management was changed and decentralization of tasks along with delegation of autonomy was introduced. In 2000 the *Defensienota 2000* was introduced, in which a further reduction was announced, along with a renewal of corporate management. This time, centralization was the key issue. In 2003 it was announced that the Defense Department would have to reduce its staff by 12000 employees, due to budget deficits. Many, if not all, reductions involved the removal of units and downsizing the organization. (Source:

two dimensions of trust also occur, but the difference between co-workers' trust and management trust is the following. Co-workers' trust refers to trust in other employees who work at more or less the same level within the organization as the individual, whereas management trust refers to trust in the superior level that gives directions to the level at which the individual works (Fukuyama, 1995; Tyler & Degoey, 1996; Lane & Bachmann, 1998). Hence, the levels at which trustees are found also differ: in co-workers' trust the trustees are found at the same organizational level as the trustor, whereas in trust in the superior level the trustees are found at a superior level to that of the trustor. Tyler and Degoey (1996) have found that outcome favorability, an instrumental judgment, and trustworthiness, an emotional judgment, are highly important for subordinates to voluntarily accept decisions taken by superior levels. Braithwaite (1998) refers to cognitive and emotional dimensions as security-oriented and harmony-oriented. She claims that knowledge about the other party's activities increases predictability, a security oriented aspect of trust, which could be viewed as cognitive. Predictability can be observed where a party complies with its outspoken intentions. If a party does not comply with its outspoken intentions, this may harm a trustor's feeling about security. Moreover, Braithwaite (1998) claims that shared identities and sharing resources rather refer to a harmony-oriented aspect of trust. If a trustee reveals the resources it has used to a trustor, it displays openness, an openness that may appeal to the trustor's positive impression about the trustee. A shared identity seems something that is felt, rather than something cognitive. One may have the same interests, but if there is a conflict of character, there is no shared identity. Somehow there is a mismatch. It will not always be easy to express what exactly it is that does not match, but the feeling of disharmony is there, which is why the shared identities and shared resources are referred to as emotional elements of trust.

The distinction between cognitive and emotional trust is corroborated by Jennings (1998), who claims that confidence in the national government depends on how well it performs (instrumental trust), whereas support for local and state government derives its strength from how well they can link between citizenry and public officials (emotional trust). The previous may lead to the conclusion that trust, whether discussed at the co-workers' or organizational superior level, has a cognitive and an emotional dimension. In this study the focus is on trust in superior levels within the organization, in which the two dimensions, cognitive and emotional, are included.

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http://www.mindef.nl:30280/mpbundels/51_serie/51_05/dp_51_05_hoofdstuk_1.htm)

Organizations may be able to contribute to co-workers' trust in the way they maintain rules: if organizations maintain their rules across all personnel even-handedly, they create a safeguard against opportunistic behavior by other individuals in the organization. Baron and Kreps (1999) argue that consistence in rule maintenance may vary over groups; in as much that management levels may maintain rules consistently for each group, but the nature of these rules may differ per group. If these managerial rules and policies are consistent in the reward structure, policies and valued behavior, then an organization creates a positive setting for organizational trustworthiness (Ford, 2003). Superior levels may need to give directions (command), set boundaries of what is and what is not allowed within the organization (control) and account for their activities and those of their subordinates or subordinate supervisors (accountability). Where maintaining rules within the organization is concerned, the organization can be consistent in its rules for similar groups of employees, thus showing that it treats its employees in an honest manner, which would enable organizational trust to arise among its employees. This is a form of reciprocity displayed by the organization that is appreciated by employees (Sanders & Van Emmerik, 2004).

Although a certain consistency in rule maintenance seems necessary, too much coerciveness is likely to have an undesired effect on employees. Coerciveness implies that discipline is traditional, bureaucratic and that employees have little autonomy when it comes to work procedures (Soeters, Winslow & Weibull, 2003). Adler & Borys (1998) have found that coerciveness causes its employees to loose initiative, whereas enabling employees to work flexibly within a set of rules would make employees more resilient in finding solutions for problems. Within an enabling organization, employees have discretionary space to do their work in accordance with norms but in a more or less empowered way (Soeters et al, 2003). The latter may be especially important for the survival of employees in organizations that may find themselves in dangerous situations where trust is salient for survival (Weick & Suthcliffe, 2001). Enabling employees by giving them more discretionary space can only work if there is trust (Adler & Borys, 1996).

Trust in superior levels seems highly linked with relational aspects, where superiors and subordinates within an organization invest energy in shared opinions and the willingness to be held responsible for their tasks. This can be seen as a cultural aspect of the organization, where norms and values are shared between organizational members (Soeters et al., 2003). For management within an organization, it seems useful that employees and superior levels within the organization share more or less similar views when it comes to organizational goals.

Tönnies refers to such organizations as a *Gemeinschaft* (Tönnies, 1963, reprint of 1935 edition). To make an organization into a *Gemeinschaft*, openness and trust are indispensable (Van Luyk & Schilder, 1997). To accomplish openness and trust, transparency in management seems necessary, as well as an open mind towards employees' opinions (consideration) so employees get the impression that they can contribute to organizational goals. If an organization would want its employees to know about organizational goals, procedures and rules, communication seems indispensable.

According to Habermas (1998), to attain proper communication it is necessary that the speaker's utterances are intelligible to the hearer, so the hearer can understand. Hence, the speaker makes himself understandable and comes to an understanding with the hearer, which requires that the speaker ascertains that the hearer understood the message. Moreover, the speaker is expected to express his intentions truthfully so that the hearer can find the utterance of the speaker credible (Habermas, 1998), involving that the speaker expresses himself in such a manner that the hearer can trust him. Organizational superior levels supply other organizational levels with information, with the purpose of attaining or improving organizational goals. Information is processed through the organization and management effectiveness much depends on how superior levels can negotiate their influence on others through communication (Hosking, 1991). This emphasizes the necessity of communication for management to invoke trust among employees. As it is, communication may also impair proper information streams if wrong or inadequate information is communicated. As such, it is likely not to support or promote management but rather to attain the opposite effect, interfere with management. Hence, in such cases trust may not arise, it may even be broken down. Although the impression may be given that there are only positive results to be expected from communication (Stoter, 1997; Sako, 1998), negative information can be communicated as well, such as gossip (Soeters, 1994; Wittek & Wielers, 1998)[33]. This boils down to the fact that supervisory levels may attempt to transmit management intentions through communication, but if what they transmit is not intelligible to the hearer, if the supervisory level does not succeed in making itself intelligible, the understanding with other organizational levels will not arise, and trust will not arise. Communication thus seems to moderate between the management and the occurrence of trust.

[33] Gossip has positive effects on trust within a group, but has negative effects on trust between groups (Tieks, 2004).

Nowadays, communication can occur in various ways. Personal communication (from person to person) and telephone communication are common ways, as well as written communication (documents on paper). The use of email communication seems to have increased rapidly over the past few years (Sarbaugh-Thompson & Feldman, 1998). Personal communication is probably essential for social integration and trust within an organization as personal communication facilitates casual conversation easier than any other type of communication (Sarbaugh-Thompson & Feldman, 1998). These four types of communication, personal, telephone, written and email, will be addressed in this study.

The relationship between considerate management, trust, and communication. Where superior levels within an organization need to take decisions by planning, motivating, organizing and control (Hersey & Blanchard, 1977), these decisions are best supported by subordinate levels if norms and values are shared between levels within the organization (Soeters, et al, 2003). This would imply that superior levels need to take into consideration the situations at the lower levels and give the lower levels the possibility to find their own solutions, instead of prescribing everything by the book (Adler & Borys, 1996). To accomplish this, superior levels may need to communicate well with their subordinate levels (Hosking, 1991). Mutual understanding and openness will likely lead to trust in the superior level (Tyler & Degoey, 1996; Braithwaite, 1998). Where situations at the subordinate levels may differ and slight adjustments in rules may sometimes be necessary for one subordinate level or another, it may be necessary that a superior level is considerate in its management and takes into account the special situation for a subordinate level, if need be (Baron & Kreps, 1999). To give an example, it may seem obscure for some subordinate levels under the same superior level why consideration for one of their colleagues is displayed. Communication seems necessary to explain this, and is therefore likely to moderate this connection between management and trust. Hence, given the previous reasoning the following hypothesis is formulated:

The more the superior level displays consideration in its management towards a subordinate level, the more trust a subordinate level has in a superior level (hypothesis 1a).

Communication between the superior level and the subordinate level is expected to positively influence the relationship between management and trust. (hypothesis 1b).

The relationship between compliance and trust, and the role of communication. Although rule maintenance may differ across the various subordinate levels within an organization (Baron &

Kreps, 1999), managerial rules and policies need to be consistent to create organizational trustworthiness (Ford, 2003). Moreover, subordinates need to comply with these rules and the extent to which subordinate levels comply with rules can be viewed as an indicator of the extent to which the organization is respected and taken seriously. Here, it must be said that compliance in the sense of following rules and orders may not always have positive sides only, as is sadly but clearly shown in the process in 1961 against Adolf Eichmann, who followed orders and thus was responsible for the death of thousands of Jews in World War Two (Verweij, 2002). In this case, orders were blindly followed without an ethical thought concerning their consequences (murdering people). In the study at hand, where rules and orders are issued for the sake of management within the RNLA, often in peacetime situations, it may generally be assumed that these rules are not unethical.

Persons in a leadership position at superior levels are the first responsible for rules being followed by their personnel, and in order to be a good example to their personnel they are not expected to deviate from rules themselves. More agreement between not deviating from rules between a superior level and subordinate levels is likely to lead to more organizational trust as it shows agreement between organizational levels in one common policy of management. If there are differences between the way superior levels deviate from rules and the way subordinates deviate from rules, these differences may primarily be resolved by communication (Hosking, 1991). Therefore, communication may have a moderating effect on the relation between compliance with rules and trust.

The more compliance with rules a superior level and their subordinate levels display, the more they trust the organization (hypothesis 2a).

Communication between the subordinate level and the superior level positively influences the relationship between compliance with rules and trust. (hypothesis 2b).

Hypothesis 1a and 1b may seem quite similar to hypotheses 2a and 2b, however an essential difference between these hypotheses is, that in hypotheses 1a and 1b the emphasis is on how a superior level solely acts as an influence on subordinate levels' trust, whereas in hypothesis 2a and 2b the emphasis is on an agreement in activities between superior and subordinate levels as an influence on subordinate levels' trust.

The relationship between strict rule orientation and trust and communication. Rules are supposed to give structure and certainty within an organization. A leader strictly sticking to

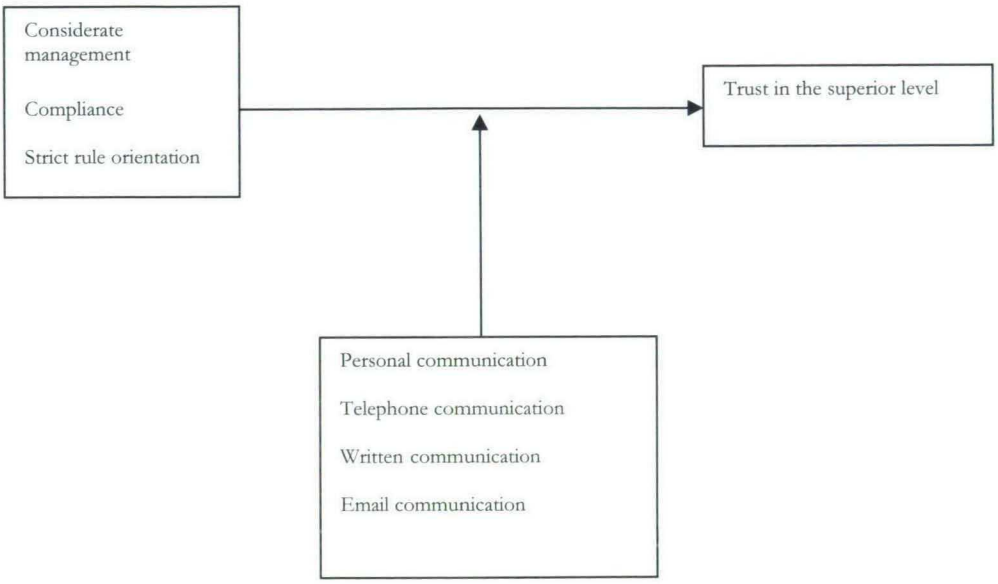
rules may expect positive organizational outcomes. If outcomes are not positive, the leader may doubt the correctness of the rules. When rules are issued, they may be clear and correct, but due to changes in the law for example, rules within an organization may need to be changed as well. This implies that superior organizational levels need to keep up to date with changes in rules, by changing the rules for their own organization. They need to inform their subordinate levels of the latest developments in rules so they (the subordinate levels) can lead their units well. Not knowing if a certain rule is still in effect may make a leader at any organizational level uncertain and may negatively influence his trust in the organization, as it will make him uncertain as to whether or not the organization consistently provides him with the adequate information. So if a leader is placed in a situation and needs to take a decision, he must make sure that he has the adequate information. Communication is necessary to supply him with the needed information (Hosking, 1991; Habermas, 1998). If proper communication lacks, he could be uncertain about the adequate information on rules and his strict rule orientation will be questionable, hence his trust in the organization may recede.

The stronger a strict rule orientation by a person in a leadership position, the more trust this person has in the organization (hypothesis 3a).

Communication positively influences the effect of strict rule orientation on organizational trust (hypothesis 3b).

The research figure is as follows:

Figure 4. The research model of the impact of consideration, compliance and communication on trust.



3. Methodology

115 Commanders[34] at several levels in the RNLA received a questionnaire by surface mail, accompanied by an introductory letter from the commander in chief of the RNLA. 68 Commanders returned the questionnaire, a response rate of 59%. Their average age was 46 years, and on average they had served in the RNLA for 26 years. Their ranks were general-major (3%, 2), brigadier-general (9%, 6), colonel (13%, 9), lieutenant-colonel (38%, 25), major (31%, 21) or captain (4%, 3). Most commanders were men (97%). 16% had completed the higher military course at the Defense College, whereas 22% had completed the middle management courses at the Defense College. They work at five different hierarchic levels within the RNLA.

For measuring trust a scale was used. Eleven items were derived from Cummings and Bromiley's Organizational Trust Inventory (OTI) (1996), this questionnaire is specifically

useful for measuring trust between units in organizations. The text in the items needed to be slightly modified as the items did not specifically pertain to the military situation. The modification included, among others, that specifically not the commander (at the superior level) himself was mentioned in the questionnaire, thus avoiding the risk that respondents would consider the person of the commander, as the intention was to imply the superior level as a whole (the commander and his staff). An example of an item is: "The superior level always keeps its word towards my unit". The answering categories were "1 = no one at the superior level", "2 = some people at the superior level", "3 = about half of the people at the superior level", "4 = most of the people at the superior level" and "5 = all of the people at the superior level". These items showed a reliable scale of 10 items with an alpha of .89, representing trust in the superior commander and his staff[35].

Five items represented considerate management. Considerate management was operationalized as the way in which the superior level shows consideration in its management towards subordinate levels when it comes to taking decisions. If management was considerate, it could be expected that it enhances subordinate commanders' trust in the superior level. The questions were derived from everyday practice in the work situation. An example: "When taking difficult decisions, the superior level evenly distributes the burdens over the subordinate levels". Possible answers were "no one at the superior level", "some people at the superior level", "about half of the people at the superior level", "most of the people at the superior level" and "all of the people at the superior level". A reliability analysis upon these items showed a five-item scale with an alpha of .86 (see appendix C).

Commanders were asked simply and straightforwardly if they deviate from rules and if they noticed that the superior level deviates from rules. It was the idea behind deviating from rules that was important, as commanders are basically expected not to deviate from rules. To say that obedience was at stake here goes a little far, hence the scale was called compliance (with rules). If both commander and superior commander do not deviate from rules, their compliance will not be as much questioned than if both do deviate from rules. Commanders were asked "Do you deviate from rules?" and "Do you notice if your superior level deviates from rules?" Possible answers were "yes" or "no". The correlation between these two items was high (Pearson correlation = .36, $p < .01$, one-tailed). Hence, the two items were computed into one concept called compliance. This new item was coded as follows: 0 = both commander

[34] Commanders in the army are all in a leadership position over a unit.

and his superior level deviate from rules; 1 = either commander or his superior level deviates from rules; 2 = neither commander nor his superior level deviates from rules (see appendix C).

Nine work situations were presented concerning commanders' strict rule orientation. These situations were derived from the practice of everyday work. These questions mainly pertained to the extent in which commanders would follow rules, and the scale was called strict rule orientation. The situations often posed a dilemma. Commanders were asked to circle the answer (per situation) that was closest to what they would do in that situation. A factor analysis was performed on these situations, showing four different factors, but the items were not mutually exclusive: some items in one factor were also included in another factor. Factor two included four items in which there was no doubt about the choice for the correct answer (the other items were sometimes so doubtful that one respondent remarked that even legal officers could not agree upon the correct answer). These four items were made into a scale which was called strict rule orientation (eigenvalue 1.46, 16 % explained variance) (see appendix C).

The questions regarding communication concerned how commanders assessed the frequency of various types of communication with the superior level. Four types of communication were mentioned. Firstly, personal communication was mentioned, meaning personal contact between commander level and his superior level. Next, telephone communication was mentioned, meaning communicating by telephone between a commander and his superior level. Third, written communication was mentioned, meaning communication by written documents, on paper. Last, email communication was mentioned, meaning communicating by electronic mail. Again, these items were derived from everyday work situations but they could be applicable anywhere, in any organization, as they simply asked about how commanders rated the frequency of various types of communication. For example: "How do you rate the frequency of communication with the superior level when it comes to: personal communication, telephone communication, written communication, email communication?". Answering categories were far too low, too low, exactly right, too high or far too high. The replies "far too low" or "far too high" were labeled as a very poor frequency of communication, the replies "too low" or "too high" were labeled as a poor frequency of communication and the replies "exactly right" were, naturally, labeled as an exactly right frequency of communication. As such, three answering categories were created. Very poor frequency was labeled as "0", poor frequency of communication was labeled as "1" and an

[35] For an overview of the questionnaires, see appendix C.

exactly right frequency of communication was labeled as "2". This was done for each type of communication.

One item concerned the statement: "In making decisions I do not only consider the interests of my superior level, but also those of the RNLA as a whole". This item concerns what commanders take into account when taking decisions. Answering categories were "never", "seldom", "sometimes", "often", "always". This item concerns what commanders take into account when taking decisions. Answering categories were "never", "seldom", "sometimes", "often", "always". This item was used to validate compliance, to be discussed later on in the chapter.

The questionnaire also contained a few open questions. One important question was an open question concerning what commanders think management is all about[36]. Another open question referred to commanders' recommendations for improvement in management (see appendix D).

4. Results

A correlation analysis between considerate management, the assessment of frequency of the four types of communication, strict rule orientation, compliance, trust in the superior level, two demographic variables, age and time served in the RNLA, shows various significant correlations (table 13).

]There is a significant positive correlation between trust and considerate management (.82), trust and the assessment of frequency of personal communication (.35) and trust and the assessment of frequency of email communication (.35). Trust correlates negatively significantly with strict rule orientation (-.31). This implies that there is a connection

[36] The Dutch Defense Department defines management as follows: *Command, control and accountability of corporate processes within the Defense organization, taking into account the demands for operational deployment."* (DP 51-30, RNLA).

Table 13. Correlations considerate management, trust, compliance with rules, strict rule orientation, frequencies of communication, age and time served.

	Mean (S.D.)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Trust in the superior level (1)	3.71 (0.56)									
Considerate management (2)	3.41 (0.72)	0.82**								
Compliance with rules (3)	1.42 (0.66)	0.14	0.06							
Strict Rule Orientation (4)	3.16 (0.61)	-.31*	-.33**	0.06						
Frequency of Personal Communication (5)	2.49 (0.61)	0.35**	0.24*	0.25*	-.17					
Frequency of Telephone Communication (6)	2.77 (0.49)	0.21	0.15	0.11	-.15	0.32**				
Frequency of Written Communication (7)	2.81 (0.43)	0.19	0.25*	0.12	-.14	0.04	0.03			
Frequency of Email Communication (8)	2.68 (0.56)	0.35**	0.36**	0.23*	-.36**	0.35**	0.21	0.11		
Age (9)	45.51 (6.14)	-.01	-.11	0.13	0.08	0.08	-.08	-.08	-.09	
Time Served in the RNLA (10)	26.01 (6.50)	-.04	-.15	0.17	0.08	0.10	-.08	-.11	-.10	0.96**

between trust and considerate management for the subordinate level and between trust and two out of four types of communication. It also shows a reverse relationship between trust and strict rule orientation: whoever strictly sticks to rules does not trust the superior level, or vice versa.

Another positive significant correlation is found between considerate management on one hand and the assessment of frequency of personal communication (.24), the assessment of frequency of written communication (.25) and the assessment of frequency of email communication (.36) on the other hand. There is a negative significant correlation between considerate management and strict rule orientation (-.33). Whoever sticks to rules does not feel there is considerate management. Compliance correlates significantly with the assessment of frequency of personal communication (.25) and with the assessment of frequency of email communication (.23). Strict rule orientation correlates negatively significantly with the assessment of frequency of email communication (-.36). Commanders who strictly stick to rules regard the frequency of email communication as more negative. The assessment of frequency of personal communication correlates significantly with the assessment of frequency of telephone communication (.32) and with the assessment of frequency of email communication (.35). The three quickest types of communication (in writing letters the message comes across slower than by talking in person, making a phone call or sending an email) are obviously related.

The assessment of frequency of telephone communication does not correlate significantly with any other type of communication, or any other aspect in the table apart from those already mentioned. The same goes for the assessment of frequency of written and email communication.

Finally, age correlates significantly with time served (.96) as could be expected: the longer one serves in the army, the older one gets.

In the method paragraph it was mentioned that the item "In making decisions I do not only consider the interests of my superior level, but also those of the RNLA as a whole" would be used to validate compliance. Out of 66 commanders who replied to this item, 23 state that they always consider the interests of the RNLA, 36 state that they often consider the interests of the RNLA, and only 7 state that they sometimes consider the interests of the RNLA. Out of those who say that they always consider the RNLA's interests (n=23), in 14 cases both commanders (at superior and subordinate level) do not comply with rules. Out of those who say that they often consider the RNLA's interests (n=36), in 23 cases both

commanders (at superior and subordinate level) do not stick to rules and in 11 cases one of the two does not comply with rules. This is reason to believe that commanders do not think compliance with rules is important with regard to considering the RNLA's interests.

In a regression analysis the effect of considerate management on trust was tested as a main effect, together with the assessment of frequency of four types of communication. Age and time served were left out, as these variables only correlated with each other, not with other variables. The regression analyses were performed accepting a p-value smaller than .10, as the group is relatively small (Plantenga, 1981)[37].

A significant effect of considerate management and the frequency of personal communication on trust was found (beta = .74; beta = .14 respectively) (table 14). This means that both considerate management and the assessment of the frequency of personal communication have a direct significant effect on trust in the superior level. Therefore, hypothesis 1a can be confirmed. Next, a regression analysis was performed with personal communication and considerate management as main effects, as they were significant in the first regression analysis, where the frequency of personal communication was also a moderator between considerate management and trust. To avoid that one variable would have a greater influence than another due to a difference in answering categories, both variables were centered before they were calculated as an interaction variable (Aiken & West, 1991; Tabachnick & Fidell, 2001). Considerate management still has a strong main effect on trust (beta = .75) and so does personal communication (beta = .18), but the interaction effect was not found to be significant. The explained variance has remained the same (65 percent). Personal communication has a direct effect on trust, but the interaction effect between personal communication and considerate management was not found to be significant. Therefore, hypothesis 1b cannot be confirmed.

[37] Plantenga argues that the consequences connected with unjustly taking a decision are less serious when a larger alpha is chosen than when a smaller alpha is chosen. In other words: sometimes it is not so wrong to choose a larger alpha as the consequences of this choice are relatively small. It depends to what extent one can afford the negative consequences of a decision. If one cannot afford them, a smaller alpha is recommended.

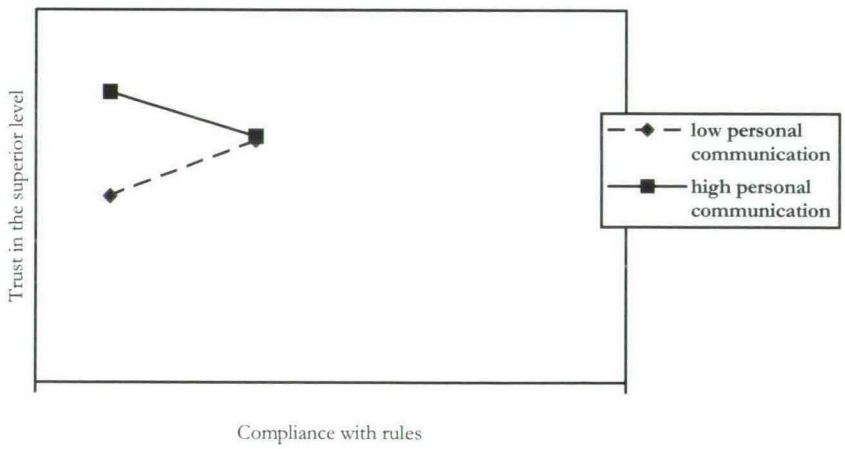
Table 14. Results of regression analyses of considerate management, compliance with rules and strict rule orientation with trust as dependent variable

Variables	**Model 1**	**Model 2**	**Model 3**
Considerate Management (CM)	.74*		
Compliance(C)		.01	
Strict rule Orientation (SRO)			-.16
Personal Communication (PC)	.14*	.23*	.23*
Telephone Communication (TC)	.04	.07	.06
Written Communication (WC)	-.01	.14	.12
Email Communication (EC)	.03	.23*	.18
CM * PC	.07		
C * PC		-.27*	
C * EC		-.01	
SRO * PC			.03
R2	.65 .65	.20 .18	.22 .17

In the next regression analysis the effect of compliance was examined, as in hypotheses 2a and 2b. In this analysis too, the various assessments of frequency of communication were first added as main effects. No effect of compliance on trust was found, but the frequency of personal communication has a significant positive effect on trust (beta = .23), as well as the frequency of email communication (beta = .23). An R-square is found of .20. When the main effect of compliance and the frequency of personal communication are examined with the interaction effect between frequency of personal communication and

compliance , the frequency of personal communication shows a significant effect on trust (beta = .28) and the interaction between compliance and the frequency of personal communication shows a negative significant effect of -.27. The percentage of explained variance has barely changed, it is 18 % now. Figure 5 shows the interaction of the assessment of the frequency of personal communication with compliance with rules.

Figure 5. The interaction between compliance with rules and the assessment of the frequency of personal communication as an effect on trust in the superior level.



The effect of compliance with rules is positive for those with a low assessment of frequency of personal communication. Under conditions of a higher frequency of communication more compliance with rules leads to lower trust. This would mean that those who do not communicate often with their superior level have trust in that level, but those who often communicate with that superior level do not.

When the regression is performed with the interaction between compliance and email communication, a direct effect of email communication is found (beta = .32) but no significant interaction effect was found. Hypotheses 2a can be confirmed. As for hypothesis 2b, the effect was expected to be positive, but it was found negative instead when it comes to the frequency of personal communication. Therefore, hypothesis 2b cannot be confirmed.

The last regression analysis refers to strict rule orientation and the four types of communication as main effects and trust in the superior level as the dependent variable

(hypotheses 3a and 3b). There is no significant effect of strict rule orientation, only of personal communication (beta = .23), the R-square is .22.

A regression analysis with strict rule orientation and the frequency of personal communication as main effects and also the frequency of personal communication as an interaction variable shows a significant negative effect of strict rule orientation (beta = -.23), a significant positive main effect of personal communication (beta = .30) but no significant interaction effect. Again, personal communication has a direct influence on trust. The explained variance is smaller than in the regression analysis with main effects only (.17 compared to .22). These results mean that we reject hypothesis 3a, and cannot confirm hypothesis 3b.

It strongly appears that personal communication directly influences trust positively, as well as considerate management. Compliance with rules does not affect trust, a strict rule orientation negatively affects trust when in combination with an interaction effect of personal communication. The results of the regression analyses are summarized in table 14.

Qualitative data of views about management are also available, but when it comes to the immediate superior level, not much has been written down. Commanders comment on the higher superior level or levels, not the immediate superior level. What management is all about according to commanders, is shown in appendix D. In their answers the words "command", "control" and "accountability" are not often mentioned, despite the fact that the definition as given by the Dutch Department of Defense (this is the definition given as footnote 33 in this chapter) can be found on the Defense intranet and these three words, command, control and accountability, are central to management. There was only one commander who used the definition from the DP 51-30.

As reasons for deviation from rules are given that rules are too complex and that it takes too much time to go deeply into the rules to find out what is and is not allowed. Another important and frequently given reason is, that, in operations, rules cannot be worked with, and this is given as an excuse to deviate from rules in order to keep the organization or the unit running. Commanders argue that rules do not support their work because rules are too rigid, too complex, too restricting and they cause a lot of bureaucratic work.

When asked for improvements in rules and regulations, the first surprising thing is that out of 68 commanders who returned the questionnaire, only 24 commanders commented on improvements in management, if it were up to them. In view of the complaints, and the fact that many commanders admitted to deviate from rules, more pro-active solutions were

expected. Commanders ask for flexibility, like the permission to flexibly deviate from rules if necessary. Rules should set boundaries within which a commander has some degrees of freedom. Therefore, rules cannot be too complicated, and should not always be copied from civilian rules as these civilian rules cannot be applied one by one to the military situation. Commanders have the feeling that accountability is regarded more important within the RNLA than flexibility, also when their operational task is concerned. This annoys commanders. Last but not least, commanders have written down their grievances about management in general. They complain about bureaucracy, too much emphasis on control and financial matters whilst they as commanders are running an operational unit[38], the core business of the army. They complain that rules are impracticable, especially in operational circumstances. There are also complaints about inconsistencies in management like the decision to decentralize, and a few years later the decision to centralize again.

5. Discussion

The main question in this study was: How do considerate management and compliance with organizational rules influence trust in higher levels within the organization and what is the role of communication in this connection?

Initially there seems to be a positive connection between trust and considerate management, and personal and email communication. This is corroborated when the effect of considerate management and of the frequency of types of communication on trust are examined. Considerate management positively affects trust. Considerate management may be looked upon as management in which there is more likely an agreement and negotiation between the two levels. If there is room for negotiation, the subordinate level will have the opportunity to express its view and in this mutual communication pattern, trust apparently arises. To speak with the words of Braithwaite (1998), if the immediate superior level displays harmony-oriented behavior towards commanders, commanders regard this as trustworthy behavior. This harmony-oriented behavior includes that a superior level takes the situation at the lower level into account, and is flexible in its management. It entails an enabling organization, giving subordinate levels the discretionary space to work fairly autonomously

[38] These complaints were mainly uttered by operational unit commanders. Not all commanders were operational unit

(Adler & Borys, 1996; Adler et al., 1999; Soeters et al., 2003). The manual for leadership in the RNLA mentions how commanders should set goals for their subordinate levels: they consult with them and set the goals together (*Handboek Leidinggeven in de KL,* 2002). This is, obviously from this study, a guideline that may lead to more trust in superior levels, and can therefore only be encouraged to follow.

Compliance with rules does not affect trust at all. With compliance with rules was meant that both commander and his superior level comply with rules. This was expected to affect trust as commanders are expected to endorse the rules given in the organization that they entered willingly. However, there was also much agreement between commanders and their superior level not to comply with rules. When the effect of compliance with rules on trust is examined, it is noticeable that personal communication and email communication both positively affect trust; hence communication again seems an essential key in trust. Personal communication negatively influences the effect of compliance on trust, meaning that for those who comply with rules and who regard their frequency of personal communication more positively, trust decreases. One could assume that commanders who have a tendency to comply with rules do not appreciate a high frequency of personal communication, the reason may be that they would consider being patronized by their superior level in a high frequency of communication, whereas commanders who have a tendency not to comply with rules do not mind having a frequent personal communication with their superior level. As such, within the category of frequencies of personal communication, there is an opposite effect of compliance on trust. Those who rate the frequency of personal communication as low, find a positive effect of compliance on trust, whereas those who rate the frequency of personal communication as right, find a negative effect of compliance with rules on trust. Perhaps the contents of the personal communication is related with the compliance with rules. The contents of communication was not tested in this study and is a ground for further study.

When it comes to strict rule orientation, its effect on trust becomes more negative when the interaction between strict rule orientation and personal communication is included, whereas personal communication becomes more positive. The direct influence of personal communication on trust cannot be denied. The paradox between following rules by both commanding levels or a strict rule orientation by commanders themselves on the one hand and personal communication on the other hand may lie in a too strong connection between two

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commanders.

levels of command, in which subordinate commanders may have the feeling that their superior level is too much on top of them. The explanation may be that those who strictly follow rules and have the impression that they are forced to follow rules will also have the feeling that they are not trusted by the organization, making them suspicious of the intentions of the organization. Communication is then not desirable and perhaps even pointless. A strong compliance with rules and a strict rule orientation belong to a coercive organization (Adler, et al, 1999). The coercive organization demands that rules are followed strictly and no discretionary space is left here. Organizational members will get the impression that they are not trusted and the best way to survive in the organization is to follow rules strictly. As negotiation is useless in such cases, communication seems superfluous. An enabling organization would give the opportunity for discussing how rules need to be followed and for exchanging views. Although the RNLA endorses initiative and discretionary space among commanders in its leadership manual (*Handboek Leidinggeven in de KL*, 2002), this apparently not always happens. If superior levels encourage subordinate levels to think consistently about how procedures can best be improved for more efficiency, and apply their ideas, they breed trust and innovation among their employees and flexibility within the organization. This is what Adler et al.(1999) call the enabling bureaucracy. In order to become an enabling organization, trust is necessary. The organization can only receive trust if it gives trust first.

Referring to the study at hand, if commanders see that their immediate superior levels take their interests into account, this maintains their trust in their superior levels. Commanders at superior levels as such give way to the enabling bureaucracy, in which there is a solid place for trust. As the remarks and replies to open questions show (appendix D), the enabling bureaucracy, where commanders are given the space to do what seems best for the organization, is applied by the immediate superior level, whereas the coercive bureaucracy, where commanders need to stick to rules, is applied by the higher superior levels, the highest levels within the organization. This agrees with the commanders' view that the higher, further away organizational levels (the levels above the immediate superior level) have a security-oriented vision, whereas their immediate superior level displays a rather harmony-oriented vision (see Braithwaite, 1998). This is an essential distinction that is also reflected in commanders' trust. They trust their immediate superior level, but not the higher superior levels (appendix B). In their eyes, rules come from the higher superior levels and seep through the organization through their immediate superior level, but the immediate superior level silently allows deviating from rules. After all, the immediate superior level also deviates from rules

itself. Referring to Tönnies (1963), it seems that the *Gemeinschaft* is present with the immediate superior organizational levels, but not towards higher organizational levels.

Communication is directly related with trust, especially with personal and email communication. Personal communication is probably not hard to understand: if one speaks directly with another person one can see the expression on his face, hear the intonation in his voice and react instantly. As Sarbaugh-Thompson and Feldman (1998) argue, personal communication within an organization is good for building trust, as in personal communication not only formal matters are discussed but also small talk, which adds to a mutual understanding. Judgments can be made about the other person's trustworthiness by what is said, intonation and body language. This is more difficult with email communication, as this includes words only. Words may be emphasized by setting them bold, italic or underscored, but the body language that is involved in personal communication lacks. Why email communication prevails over telephone communication, whereby one can at least hear the other person's intonation, is maybe a feature of the present time, where much is done by email. Sarbaugh-Thompson and Feldman (1998) have found that email communication has increased rapidly since its introduction. However, they also found that email communication has pushed aside personal communication somewhat, and that this comes at the expense of personal contact and casual talk within an organization, which they regard important for good mutual understanding as well. Email communication is quick and not time dependent: the two participants in the interaction need not be present at the same time to interact. This makes email an easy means to communicate. Perhaps email communication is used more often than telephone communication, which is also quite personal.

6. Conclusions and recommendations

The RNLA claims that it is managed by "guiding by main principles" (Van Baal, 2004), which would imply an enabling bureaucracy. The way commanders experience it, in practice this "guiding by main principles" does not always happen, they look upon the levels above their immediate superior level in the RNLA as a coercive bureaucracy, but they would like it to be more enabling. Whereas the RNLA needs to operate flexibly for accomplishing its missions, an enabling attitude should be applied more throughout the organization.

Organizational trust can be enhanced if superior levels within the organization display considerate management towards their lower level commanders and are willing to adjust their management, and apply sufficient personal communication in their management. Hence, rules and procedures should sometimes be deviated from if necessary for proper operation, and superior levels should accept this. This is not as impossible as it may seem. The RNLA is already heading into the direction of becoming an enabling organization Soeters et al., 2003) but practice lags behind. If the RNLA trusts its employees to perform to the best interest of the organization and enables them with discretionary space, trust throughout the organization is likely to increase. As such, the organization will become a high reliability organization (Weick & Suthcliffe, 2001) as it can expect its members to do whatever it takes to get the job done, even if this means deviating from rules. This is essential for an organization that operates under dangerous circumstances. The RNLA is one of those high reliability organizations as mentioned by Weick and Suthcliffe (2001). Moreover, when commanders come across a situation that they are not sure of how to deal with, superior levels can increase their subordinate commanders' trust by personally communicating with them. Communicating by email could be a good replacement if personal communication seems impossible at that moment.

The study has some limitations. The number of respondents was not quite high, only 68. Hence, dividing the frequencies of communication in three groups (very poor, poor and exactly right) resulted in relatively small groups. The results must be approached with caution, but they do give reason for further research.

Moreover, the items concerning trust and management were sometimes a bit close in their meaning, which may have caused the high level of explained variance in trust when the effect of considerate management on trust was examined. The meanings were close perhaps because considerate management is quite close to benevolence and honesty, the emotional aspects of trust.

The items concerning the frequency of communication have lost some of their meaning when they were recoded. The value "1" was given when a frequency of communication was either much too high or much too low, whereas originally a distinction was made between a much too high or much too low frequency of communication. The same goes for the values 2, meaning a too high or too low frequency of communication.

In general, the findings of the study open grounds for further study within organizations into the role of management, communication and trust. The possibilities for an

enabling or coercive bureaucracy could be further explored, along with the role of communication to improve organizational trust.

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Discussion

The central research question in this book is: "How can the development of trust among servicemen in the various stages of their longer lasting relationship be explained?" The answer to this question was sought in four studies.

Chapter one addresses the question what extent four beliefs, competence belief, predictability belief, honesty belief and benevolence belief are components of trust. Components of trust are essential as trust is a sensitive subject and, as such, likely to be subject to social desirability in surveys. Soldiers assess if they can trust other soldiers by other soldiers' perceived competence, predictability, honesty and benevolence. Competence entails skills learned in training, quality of work and assessed professionalism. Predictability refers to the extent to which they can count on each other and the way in which they expect their colleagues to react in different situations. Honesty is assessed by the extent to which soldiers think their colleagues follow up in doing what they say, and their openness amongst themselves. Exchanging ideas and open discussions form part of honesty among soldiers. The fourth aspect, benevolence belief, is assessed by the extent to which they expect their colleagues to work accurately, by their willingness to help each other and the general opinion that they co-operate quite well in the platoon. This aspect incorporates an extent of altruistic behavior, as the willingness to assist does not require reciprocity from the recipient. The four aspects cannot be considered as separate aspects, as a positive result on one aspect and a negative result on another aspect could, for example, mean that someone is competent but not willing to co-operate, and trust would not arise.

Referring to the central research question, in order to explain trust four beliefs should be examined. Trust can further be explained by two aspects that precede trust formation. The first aspect is disposition to trust. In chapter one, two and three is shown how disposition to trust, the general trust a person has in other people, influences the emergence of trust. People with a low disposition to trust are likely to develop less trust in others than people with a higher disposition to trust.

As for trust within organizations, the way the organization maintains its rules can make a difference for trust formation. For interpersonal trust, an organization creates a safeguard against untrustworthy and opportunistic behavior by consistently maintaining rules.

Who crosses the line will be retributed. This is thought to be an incentive for soldiers to be trustworthy.

In the longer lasting mutual relationship, these components and antecedents remain, as is shown in chapter two. Throughout a deployment, trust appears to be fairly stable. Trust appears to follow a flat line mainly, i.e. a constant pattern: high trust in the beginning implies high trust halfway during deployment and at the end. Likewise, low trust in the beginning implies low trust halfway during deployment and at the end. Moreover, the order of the four beliefs, competence belief, predictability belief, honesty belief and benevolence belief, hardly changes over six months, whereas the two emotional beliefs, honesty belief and benevolence belief, appear to be more important throughout deployment than the two cognitive beliefs. The different results between units can be explained by differences in how the missions started. In the unit that went to Cyprus as well for the first mission to Bosnia things went rather smoothly and the local situation was quite stable, stability reflected in trust development. Although tensions grew in Bosnia towards the end of the deployment, by then the interpersonal relations had grown to be pretty stable. In Cyprus, things grew a little tense between the Dutch soldiers and the British but apparently not enough to influence their trust. As for the second mission to Bosnia, the soldiers knew there were tensions and irregularities in the deployment area they would be going to. Moreover, they had to deal with uncertainties about their comrades as they did not all know each other so well at that time. Therefore, their trust development may have had a difficult start and may not have recovered from that. Although there are differences between the first and the second deployment to Bosnia, the prominence of the emotional beliefs is evident in both missions, as well as in the unit that went to Cyprus, where emotional beliefs were prominent at the beginning and at the end of the deployment. It seems that trust is rather emotional than cognitive.

Another remarkable aspect in the development of trust is, how disposition to trust, which was thought to be fairly stable, follow a pattern similar to that of trusting beliefs. The question arises if disposition to trust, apart from being an antecedent, is influenced by trust, whereas it appears that trust is influenced by disposition to trust or in other words: is there a mutual relation between trust and disposition to trust? This is an avenue for further research.

Chapter three shows how task-oriented aspects (competence) are not only salient for trust in colleagues, but also for trust in superiors. Leaders need to show that they know what to do and how to do it when they and their unit find themselves in dangerous situations. Apparently, this knowledge gives subordinates the impression that their leader is competent

enough to minimize danger as much as possible, meanwhile not loosing the focus on what needs to be done, the task of the team. This appears to enhance their trust in the leader.

Although it could not be confirmed that relation-oriented leadership in the absence of risk invokes trust among subordinates, there are several relation-oriented aspects – in the sense of experiences with the leader, attention for the group – that invoke trust. This is reason to believe that some relation-oriented behavior is indeed essential for trust formation in everyday situations among subordinates in their superior.

In the fourth chapter the effect of management and communication on trust were examined. The RNLA endorses management by which commanders have some discretionary space, however, in practice many commanders are held accountable for little details in their actions; hence these commanders have the perception that they are being strictly held to rules. The consequence is that commanders, in order to avoid reprimands, strictly stick to rules which works against the flexibility of the organization, a flexibility that is necessary because the RNLA is a high reliability organization. Moreover, it works against their trust in the organization. In brief, the organization claims to be enabling but in practice it seems not to have reached this stage yet. This enabling stage, including negotiation, room for discussion, consideration, is essential for trust, as is shown in the strong effect of considerate management on trust. Superior organizational levels showing consideration towards their subordinate levels will invoke trust. This is also shown in little details, like understanding that situations at a subordinate level have changed, and acting accordingly. This will lead to trust at that subordinate level, and trust is needed to make the RNLA an enabling organization. The organization shows that it trusts its subordinate levels by giving then discretionary space and their own responsibility, and not so much demanding accountability for details afterwards (although sometimes accounting will be necessary).

There also seems a role for communication in relation to trust. More personal communication between superior and subordinate level leads to more trust between them. However, when it comes to compliance with rules an opposing effect occurs: in low personal communication, the effect of compliance with rules is positive, hence when there is more compliance with rules there is more trust. Opposite, when there is much personal communication more compliance with rules leads to less trust. Hence, low personal communication does not need to be a negative aspect, since it can lead to more trust if there is more compliance with rules. Here, there may be mutual understanding without saying too much. Words are superfluous.

Trust appears to be well measured by a twelve-item scale, ruling out the chances of social desirability when the direct question "Do you trust your colleague" is asked. Apart from this scale, other already existing questionnaires like that of Johnson-George and Swap (1982) and Cummings and Bromiley (1996) are useful for measuring trust.

The four components reflect aspects mentioned in the Dutch army Code of Ethics. Army personnel intend this Code of Ethics as a means to an end of moral conduct. This gives the army the opportunity to promote trustworthy behavior by its personnel in educating it in the Code of Ethics. In a time when army ethics get increasing attention within the army (Van Iersel & Baarda, 2002), this is an opportunity that should not be missed.

Conclusions

Emotional beliefs prevail over cognitive beliefs when trust is measured over a longer period of time. This would imply that trust it is mainly an emotional matter, raising the question of how an organization can promote trust. It is likely that maintenance of rules can contribute to this as it appears to be an antecedent of trust throughout deployment, though the results demonstrate that its influence is smaller than that of disposition to trust. If leaders consistently maintain the rules for all personnel, they notice that their personnel trusts their colleagues more than if rules were not maintained even-handedly. There seems to be a paradox between consistently maintaining rules on one hand and being considerate in rules on the other hand. Being consistent towards those with little discretionary space will give them a safeguard against untrustworthy behavior from others. Hence, maintaining rules consistently enhances trust among employees. If superior levels are considerate towards those with discretionary space, such as leaders in the organization, giving them autonomy, the leaders will get the opportunity to use their capabilities. The organization displays harmony-oriented behavior, enabling its leaders, hence giving way to flexibility, which is necessary for a high reliability organization. Moreover, when commanders come across a situation they do not know how to deal with, superior levels can increase their subordinate commanders' trust by personally communicating with them. Communicating by email could be a good replacement if personal communication seems impossible at that moment.

Trust can be measured by using a scale in which competence belief, predictability belief, honesty belief and benevolence belief are incorporated. The scale used in this book are all useful. The use of a scale rules out the risks of social desirability when asking a direct question about trust.

As was already said: not only the army can draw its conclusions from this study, but other organizations as well. It is my sheer conviction that trust can be promoted by laying emphasis on competence, predictability, honesty and benevolence of personnel. These four aspects should not be separated, they belong together or else the balance would be lost and it would be no longer trust we are talking about, but one of the aspects in which the other(s) get lost in the fog. This pertains to all personnel, throughout all layers of the organization. One could even relate this to areas outside organizations, to everyday life. In communicating with

people in shops, retailers, banks or whatever transactions and contacts occur in human life, even with animals, these four aspects are in my opinion essential for trust formation.

Recommendations

Leaders, also future leaders such as officer-cadets, should focus on good task-fulfillment. This is already an important part of the officers' training, but the specific skills for arms and services now have to be mastered in six months, whereas this used to be one year. But not only task fulfillment, also being a good human being, communicating well with others, taking an interest in those one is responsible for, relating to them will increase trust formation.

In order to reduce uncertainty among personnel that goes on a mission, the unit about to come home could send a small advance party from the deployment area home to inform the upcoming unit directly about the mission and what is going on in the area. This should be done in combination with staff members of the Operational Staff, who have a broader view on deployments in general.

Large organizations like an army should be aware not to let coerciveness take over in a bureaucratic organization. Enabling commanders, giving them discretionary space will contribute to their trust. Personal communication, with email communication in the second place, can support trust formation.

Disposition to trust is evidently an antecedent of trust. Whereas trust is necessary within an organization, it would seem advisable to include a measurement for disposition to trust in the selection process, in which the preference could be given to candidates with a not too low disposition to trust.

Limitations

A limitation is that in some studies the items needed to be translated from English into Dutch, and also the items needed to be modified from the civil situation into the military situation. This may have negatively affected the validity of some items.

The number of respondents was not always quite high. Although a substantial number of respondents participated in the studies in chapters one and two, these numbers were reduced when the respondents were divided into groups. The same goes for the study in chapter four, where 68 respondents participated, but the division into various frequencies of communication resulted in relatively small groups.

Also, the scales are sometimes a bit small. Perhaps in future studies they could be extended with a few items without losing the meaning of the scale.

In chapter four, the items concerning trust and management were sometimes a bit close in their meaning, which may have caused the high level of explained variance in trust when the effect of considerate management on trust was examined. The items concerning the frequency of communication, also in chapter four, have lost some of their meaning when they were recoded.

Avenues for further Research

Although trust can generally be considered a fairly consistent, stable but rather emotional aspect in existing interpersonal relations, situations seem to contribute to trust development: one may be personally prepared, but if interpersonal relations are relatively new and if irregularities are expected, this may increase uncertainty and influence trust. Such situations should be studied more closely in both a survey and simultaneous interviews on the spot. Participating observation and interviews may give more background and in-depth information.

As for rule maintenance, from the questionnaire it can be more or less derived how rules were maintained, but it is recommended to interview servicemen on the spot to gather information about the way rules really are maintained.

Apart from disposition to trust and maintenance of rules, it may be expected that other elements are likely to precede the formation of trust. A search for these elements opens fields for further study into trust. This basically refers to all studies in this book. The book builds on previous research, but it can also be seen as a start for further research into the effect of trust within organizations.

The connection between disposition to trust and trusting beliefs is, concluding from chapters one and three, that disposition to trust precedes trust. In chapter two was shown how disposition to trust and trust follow the same pattern, hence in future studies it is recommended that this connection is further examined. Especially interesting would be to examine how trust influences disposition to trust, as such an influence would imply that disposition to trust can be changed by trust.

The frequency of communication types, and not their contents was tested. It is recommended that in future studies the contents could be studied in relation to trust in the communication partner.

Summary

In this study I have examined how the development of trust among servicemen in the various stages of their longer lasting mutual relationship can be explained. The study was done among servicemen within the Royal Netherlands Army.

To find an answer to the research question, I first looked for components of trust and trust antecedents, using a model that has been developed by McKnight, Cummings and Chervany (1998). As antecedents of trust, aspects that precede trust formation before any interpersonal interaction may have taken place, the disposition to trust and the maintenance of rules within a military unit have been found to be essential. The disposition to trust is the trust a person generally has in others, regardless whether one knows this other person or not. This trust formation takes place from early childhood and is generally assumed to be little subject to change. However, when examining trust development over time among soldiers, this disposition to trust seems to change in line with a change in trust. The question is now, if disposition to trust influences trust or if trust influences disposition to trust. The former has been the starting point in this study, the latter may not be excluded in future studies.

Maintenance of rules, the other antecedent, pertains to the way in which unit command maintains the rules across all personnel. Although rules are necessary for good functioning of a unit, unit commanders may differ in their rule maintenance. An even-handed manner of maintaining rules appears to positively influence interpersonal trust among servicemen.

However, rule maintenance should not be that strict so that those subject to the rules have no discretionary space left. When commanders were asked their opinion about rule maintenance, they claimed that, though officially they had discretionary space to decide about several aspects under their command, it turned out that bureaucracy produces so many rules and procedures that somehow they always seem to deviate from rules. They think there are too many rules and ask for more responsibility. In other words, the organization, in this case the army, should be more enabling. Somewhere between maintenance of rules and enabling a balance must be found so the optimum of unit functioning can be reached.

Leadership is essential within the army since there are so many hierarchical levels of command. Hence, it was asked what leadership style would be most appropriate to invoke trust among subordinates. Two possibilities were given, derived from a model by Hunt and Phillips (1991): a task-oriented leadership style in dangerous situations and a relation-oriented leadership style

in barracks (not dangerous) situations. Subordinates appear to prefer a task-oriented leadership style in the dangerous situation over a relation-oriented leadership style in a barracks situation when it comes to their trust in their commander. However, the relation-oriented effect of subordinate trust in their commander must not be ruled out, since subordinates also indicated that the experiences they had with their commander, be it attention for their personal situation, a compliment for good work, have much influence on their trust in the platoon commander.

Trust, the central topic in this study, was mainly measured by measuring four aspects in the trustee: the trustor's belief that the trustee is competent, predictable, honest and benevolent. These aspects are related to each other: one without the other may undermine trust, or may cause that trust does not arise. A competent person (the trustee) cannot be trusted if he appears not to be willing to use his competence in favor of a trustor, or if he appears to be dishonest, or unpredictable. A predictable person can be trusted, provided that he is competent in the task concerned, and willing to assist (display benevolence). An honest person is maybe the most appealing to trustors, but honesty alone is not enough if benevolence, or competence, or predictability, or all three aspects are missing in that person. Benevolence does no good to trust in the absence of competence or predictability. How can someone be trusted if he is sometimes willing to assist another person, and other times not?

The development of trust among servicemen in their longer lasting relationship can be explained by their disposition to trust, by the way commanders maintain rules and by task-oriented leadership in risky situations. Moreover, trust can be measured by measuring four aspects: competence belief, predictability belief, honesty belief and benevolence belief.

Samenvatting

In deze studie heb ik onderzocht hoe de ontwikkeling van vertrouwen onder militairen in de verschillende stadia van hun langere onderlinge relatie kan worden verklaard. De studie werd verricht onder militairen bij de Koninklijke Landmacht.

In eerste instantie ben ik op zoek gegaan naar componenten van vertrouwen en antecedenten van vertrouwen. Daarbij heb ik gebruik gemaakt van een model dat werd ontwikkeld door McKnight, Cummings en Chervany (1998). Twee antecedenten van vertrouwen, aspecten die vooraf gaan aan het genereren van vertrouwen, nog voordat enige interpersoonlijke interactie heeft plaatsgevonden, zijn gevonden: de dispositie voor vertrouwen en de handhaving van regels binnen een eenheid. De dispositie voor vertrouwen is het vertrouwen dat iemand van kindsbeen af ontwikkeld ten opzichte van anderen in het algemeen. Er wordt aangenomen dat de dispositie voor vertrouwen nauwelijks verandert tijdens een mensenleven. En toch is geconstateerd in het onderzoek naar de ontwikkeling van vertrouwen tijdens drie uitzendingen dat de dispositie voor vertrouwen verandert op dezelfde manier als vertrouwen zelf verandert. De vraag rijst nu of de dispositie het vertrouwen beïnvloedt, of andersom. Het eerste is uitgangspunt geweest in deze studie, maar de andere mogelijkheid mag in toekomstige studies niet worden uitgesloten.

De handhaving van regels, het andere antecedent, heeft betrekking op de manier waarop de eenheidscommandant de regels handhaaft onder het personeel. Hoewel regels noodzakelijk zijn om een eenheid goed te laten functioneren, kunnen eenheidscommandanten wel verschillen in de manier waarop zij de regels handhaven. Een gelijkmatige manier, waarbij een ieder op soortgelijke wijze wordt behandeld, lijkt de beste manier om vertrouwen van ondergeschikten onderling te bevorderen.

Echter, de handhaving van regels moet ook weer niet zo strak zijn dat degene op wie de regels van toepassing zijn geen enkele beslissingsruimte en initiatief meer hebben. Toen commandanten om hun mening werd gevraagd voor wat betreft de handhaving van regels, klaagden zij dat het officiële beleid wel is dat zij beslissingsruimte hadden, maar dat de bureaucratie zo veel regels produceert dat zij op een of andere manier altijd wel van regels afwijken. Zij zijn dan ook van mening dat er te veel regels zijn en vragen om meer verantwoordelijkheid. Met andere woorden: de organisatie, in dit geval de Koninklijke Landmacht, moet meer ruimte bieden en minder dwingend zijn. Ergens tussen die handhaving

van regels en het bieden van ruimte moet een optimum gevonden worden voor het functioneren van een eenheid.

Leiderschap is essentieel binnen de landmacht, aangezien er zo veel hiërarchische niveaus zijn. Daarom werd gevraagd welke leiderschapsstijl het meest geschikt zou zijn om vertrouwen van ondergeschikten te winnen. Er werden twee mogelijkheden gegeven, ontleend aan een model van Hunt en Phillips (1991): een taakgerichte leiderschapsstijl in gevaarlijke situaties en een relatiegerichte leiderschapsstijl in een kazernesituatie (ongevaarlijke situatie). Het blijkt dat ondergeschikten de voorkeur geven aan een taakgerichte leiderschapsstijl in gevaarlijke situaties, boven een relatiegerichte leiderschapsstijl op de kazerne. Toch moet het relatiegerichte effect van vertrouwen van ondergeschikten in hun commandant niet onderschat worden, want ondergeschikten gaven ook aan dat hun ervaringen met hun commandant (een compliment, of aandacht voor hun persoonlijke situatie) grote invloed hebben op hun vertrouwen in hun commandant.

Vertrouwen, het centrale onderwerp in deze studie, werd voornamelijk gemeten door vier aspecten te meten: de aanname van een persoon dat iemand die vertrouwd wordt competent is, voorspelbaar, eerlijk en welwillend. Deze aspecten zijn aan elkaar gerelateerd: de een zonder de ander doet geen vertrouwen ontstaan, of kan het vertrouwen verminderen. Een competent persoon kan niet vertrouwd worden als hij niet bereid blijkt zijn competenties te gebruiken ten gunste van de ander, of als hij oneerlijk of onvoorspelbaar is. Een voorspelbaar persoon kan vertrouwd worden, op voorwaarde dat hij competent is in die specifieke taak, en bereid om te helpen (welwillendheid toont). Een eerlijk persoon spreekt wellicht het meest aan als het gaat om vertrouwen, maar eerlijkheid alleen is onvoldoende indien competentie, voorspelbaarheid of welwillendheid ontbreken bij die persoon. Welwillendheid is nutteloos voor vertrouwen als competentie of voorspelbaarheid afwezig zijn. Hoe kan iemand vertrouwd worden als hij de ene keer wel bereid is om te helpen en de andere keer niet?.

De ontwikkeling van vertrouwen onder militairen tijdens hun langer durende onderlinge relatie kan verklaard worden door hun dispositie voor vertrouwen, door de manier waarop commandanten de regels handhaven en door taakgericht leiderschap in gevaarlijke situaties. Daarnaast speelt hun algemeen vertrouwen in anderen een rol, en de ervaringen die ondergeschikten met hen hebben. Daarnaast kan vertrouwen gemeten worden door het meten van vier aspecten, namelijk competentie, voorspelbaarheid, eerlijkheid en welwillendheid.

APPENDICES

Appendix A. Code of Ethics Royal Netherlands Army.

1. I try to get the best out of myself and am prepared to learn from my mistakes.

2. I show in attitude and behavior that I am proud to work in the RNLA.

3. As a member of a team I need my team-mates and they need me. I therefore feel responsible for their well-being and if necessary I talk to them about their behavior.

4. I am responsible for a correct use of our equipment and money that have been put in my responsibility and of the services that are offered to me.

5. In all my actions I think about my own safety and that of my surroundings. Therefore I do not use drugs and limit myself in the use of alcohol.

6. I respect human rights and stick to the rules of Martial Law. I treat all people equally and with respect and if necessary provide help to others in need.

7. I perform my tasks professionally, even under difficult circumstances and in life-threatening situations.

8. I shall never abuse the power in my possession. If ordered I will use violence, but no more than necessary to perform my task. Everyone, particularly my opponent, may count on me being persistent and tenacious.

Appendix B: Scale analyses for the components of trust, disposition to trust and maintenance of rules.

The questionnaire comprised from the scales below was also submitted in the study as discussed in chapter two. The blocks below the line represent the non-scaling items.

Table B1. Mokken scale analysis for disposition to trust. H-coefficient .39.
Answering categories: 1 = totally disagree; 2 = fairly disagree; 3 = fairly agree; 4 = totally agree

Item	H-coefficient	Mean
It is in the human nature to work together well.	.36	2.44
When you are really in trouble there will always be someone to help.	.33	3.12
If you act with others in good faith, they will act likewise with you.	.45	3.14
If you are open for someone else, that person will be open for you as well.	.43	2.94
Never trust strangers. (-)*	-.07	2.69
If you don't pay attention, people will take advantage of you. (-)	-.15	2.80
If you want someone to perform a task well, you'll need to explain this task well and monitor his performance. (-)	.05	2.75
When it comes down to it, nobody cares. (-)	-.14	1.97
If you let someone perform a task he will do it to the best of his abilities.	.25	3.15

* Items marked with an (-) were negatively formulated.

Table B2. Mokken scale analysis of items for maintenance of rules. H-coefficient .41.

Item	H-coefficient	*Mean*
The company's orders are clear about what is and what is not allowed.**	.45	3.28
In this unit there is a close watch on us to stick to the rules.**	.38	3.98
I think sufficient attention is paid to our sleeping quarters.	.41	2.61
Defects on equipment are repaired as soon as possible.	.00	3.27
I am well informed of the developments in the base.	.21	2.14
My group's equipment is fit for its purpose.	.25	2.66
My group has sufficient equipment to perform its duties.	.20	2.49
I am satisfied with the information we get in advance about our company's assignments.	.27	3.86
My home-front can always reach me during my deployment.	.22	3.96

** The answering categories for the first two items are: 1 = totally disagree; 2 = fairly disagree; 3 = fairly agree; 4 = totally agree. the answering categories for the other seven items are: 1 = totally disagree; 2 = fairly disagree; 3 = neither disagree, nor agree; 4 = fairly agree; 5 = totally agree. In order to scale them and make answering categories comparable, the first three items were recoded as follows: 1 = 1; 2 = 2; 3 = 4; 4 = 5. Thus, answering category 3 is non-existent in these items.

Table B3. Mokken scale analysis of items for competence belief. H-coefficient = .47

Answering categories: 1 = totally disagree; 2 = fairly disagree; 3 = fairly agree; 4 = totally agree

Item	H-coefficient	Mean
The level of education is high in my platoon.	.37	2.59
My colleagues always deliver good quality work.	.50	3.01
I think my colleagues do a professional job.	.54	3.12

Table B4. Mokken scale analysis of items for predictability belief. H-coefficient = .57

Answering categories: 1 = totally disagree; 2 = fairly disagree; 3 = fairly agree; 4 = totally agree

Item	H-coefficient	Mean
I know how my colleagues will react in different situations.	.56	2.81
I know where I stand with my colleagues	.61	3.06
Within my platoon we know that we can count on each other.	.53	3.11
If some of us knew better how others do their jobs, they would worry (-)*.	-.08	2.35
My colleagues' behavior is very different. I do not always know with what they will surprise me (-)*.	-.10	2.37

* Items marked with an (-) were negatively formulated.

Table B5. Mokken scale analysis of items for honesty belief. H-coefficient = .46

Answering categories: 1 = totally disagree; 2 = fairly disagree; 3 = fairly agree; 4 = totally agree

Item	H-coefficient	Mean
My colleagues tell what they think of me.	.46	2.88
I can count on my colleagues to stick to their promises most of the times.	.45	3.06
Within my platoon we can openly discuss our ideas and expectations.	.47	3.15

Table B6. Mokken scale analysis of items for benevolence belief. H-coefficient = .60

Answering categories: 1 = totally disagree; 2 = fairly disagree; 3 = fairly agree; 4 = totally agree

Item	H-coefficient	Mean
I can count on my colleagues not to make my work harder by working inaccurately.	.60	3.00
We are always prepared to help each other.	.61	3.16
In my platoon we work together very well.	.61	3.21
In this platoon you are on your own (-).	-.31	1.84

* Items marked with an (-) were negatively formulated.

Non-scaling items were often but not consistently negatively formulated. Another reason for non-scaling can be that items according to their contents do not fit in with other items in the suggested scale. This is especially the case with the items for maintenance of rules, where items about maintenance of equipment were included. Though good equipment maintenance may be seen as maintenance of rules as it represents consistent care for people so they can do their job, it is not seen as a safeguard against opportunistic behavior by others.

Table B7. Second order Mokken scale analyses on all items for beliefs together. H-coefficient = .46
Behind each item we give the belief it belongs to. C = competence belief, p = predictability belief, h = honesty belief, b = benevolence belief.

Item	H-coefficient	Mean
The level of education is high in my platoon (c).	.34	2.59
I know how my colleagues will react in different situations (p).	.37	2.81
My colleagues tell what they think of me (h).	.43	2.88
I can count on my colleagues not to make my work harder by working inaccurately (b).	.40	3.00
My colleagues always deliver good quality work (c).	.50	3.01
I can count on my colleagues to stick to their promises most of the times (h).	.48	3.06
I know where I stand with my colleagues (p).	.47	3.06
Within my platoon we know that we can count on each other (p).	.57	3.11
I think my colleagues do a professional job (c).	.51	3.12
Within my platoon we can openly discuss our ideas and expectations (h).	.44	3.15
We are always prepared to help each other (b).	.51	3.16
In my platoon we work together very well (b).	.53	3.21
In this platoon you are on your own (-)*(b).	-.18	1.84
If some of us knew better how others do their jobs, they would worry (-)*(p).	-.08	2.35
My colleagues' behavior is very different. I do not always know with what they will surprise me (-)*(p).	-.08	2.37

* Items marked with an (-) were negatively formulated.

Table B8. Mokken scale analysis on the four scales of trusting beliefs. H-coefficient = .55.

Belief	H-coefficient	Mean
Competence belief	.56	8.91
Honesty belief	.59	9.26
Benevolence belief	.51	11.36
Predictability belief	.55	11.49

Appendix C. Scales for trust in the superior level, considerate management, compliance with rules and strict rule orientation

Trust

This scale was constructed using reliability analysis. The alpha was .89. Answering categories were 1 = no one at the superior level; 2 = some at the superior level; 3 = about half of those at the superior level; 4 = most at the superior level; 5 = all at the superior level.

1. My superior level informs my unit correctly.
2. My superior level sticks to its agreements with my unit.
3. I think my superior level is reliable.
4. My superior level deals with my unit in an honest manner.
5. My superior level always keeps its word towards my unit.
6. My superior level never informs my unit incorrectly.
7. My superior level never tries to get away from agreements towards my unit.
8. In general, my superior level discusses expectations openly with my unit.
9. My superior level tries to fulfill its mission at the cost of my unit.
10. My superior level tries to tell my unit how we should do our job.

Considerate management

This scale was constructed using reliability analysis. The alpha was .86. Answering categories were 1 = no one at the superior level; 2 = some at the superior level; 3 = about half of those at the superior level; 4 = most at the superior level; 5 = all at the superior level.

1. My superior level understands that changed circumstances may lead to different principles
2. In taking decisions the superior level tries to put itself in our position
3. When decisions do not lead to the desired results, my superior level is prepared to adjust its policy.
4. My superior level tries to discover what determines my point of view.
5. My superior level is interested in my point of view.

Compliance with rules

The correlation between these items was .36. By computation a new item was constructed with the following answering categories: 0 = both commander and his superior level deviate from rules. 1 = either commander or his superior level deviates from rules. 3 = neither commander nor his superior level deviates from rules.

Do you deviate from rules?	Yes / No
Do you ever notice that your superior level deviates from rules?	Yes / No

Strict rule orientation

The scale was constructed using factor analysis. The situations below are dilemmas for a commander. The answering categories are labeled such that for reply one, one point was given, for reply two, two points etcetera. The higher the point given, the more the reply is in accordance with the formal rules. Eigenvalue = 1.46, percentage of explained variance 16%.

1. Private van der Kolk is an attractive female clerk within your unit. She works in the office of sergeant-major van Veen and captain Boll. One day she complains to you about sergeant-major van Veen. He is making sexually intimidating jokes in her presence, and insinuates about her and her boyfriend. She already told him that she does not like this but he as well as the captain said she should not fuss about it, that this is all in the game in the service. Now she comes to you because she wants to file a formal complaint about sexual intimidation with the army confidant. You appreciate sergeant-major van Veen's work very much within your unit. What would you do? (eigenvalue = .46).

1. You tell her not to fuss about it. It's all in the game when you're in the service.
2. You do not believe her. Sergeant-major van Veen would not do this. You do not pay much attention and warn her about not accusing anyone falsely.
3. You try to calm her down, let her tell her story and tell her that it isn't all as bad as it looks. You'll talk to sergeant-major van Veen and captain Boll. "Anything but a formal complaint against these men" is what you think.
4. This is a serious problem. If this is true, Van Veen and Boll are in trouble and this could hit back on you. U talk to the men and warn them. You give private van der Kolk the opportunity to call the army confidant.

2. At the shooting range you get your hot meal from the kitchen at the barracks, but the temperature of the hot meal is too low, according to the regulations. If you serve this meal to your troops, you run the risk that everyone becomes sick. What would you do? (eigenvalue = .50)

1. You let them eat the meal, because everyone is hungry. You'll make a fool of yourself if you let yourself be intimidated by a few degrees of too low temperature.
2. You tell everyone not to eat this meal and serve sandwiches.
3. You send the food back to the kitchen and order them to prepare a new meal. This will take approximately three hours.
4. You let them prepare hot field rations, this goes relatively quickly.

3. As a private person you are invited for a command change of a good friend. How will you go there? (eigenvalue = .32)

1. In an army car.
2. In your private car, but you
3. You go with a colleague who uses his private car.
4. In your private car, as it is a private invitation.

4. A woman in your unit asks to borrow a digital camera, owned by the army, for a party in the weekend with her relatives, among whom there are many defense employees. What do you do? (eigenvalue = .52)

1. Nobody uses the camera in the weekend, so why not let her have it for the weekend?
2. You already agreed that she uses it for another event in which many defense employees participated. This time it is hard to refuse. You reluctantly agree.
3. "No, I cannot do this" is you blunt reply, and you do not give it to her.
4. You explain to her why she cannot borrow the camera, and you do not give it to her.

Appendix D. Commanders' replies to open questions and their remarks.

Below the replies to the open questions are given, as well as the loose remarks commanders wrote in the questionnaires.

Why would you deviate from rules?

Rules leave space for interpretation, however, if higher levels give advice they seem to be risk-avoiding. I don't think rules are always one to one applicable to the work floor, there is a difference between nice to have and need to have.

Most rules are so comprehensive that not everything is known. In other words, one deviates from rules without knowing it.

The nucleus of the problem with rules is that those who make them, want to do this comprehensively: rules are written such that something in them can apply to any level in the organization. Moreover, their interest seems to be that it is not their fault if mistakes are made: mistakes are corrected by making new rules. Necessary support is not given.
Those who make rules take the commander's seat without really being responsible, and put their own specialty in the middle, as if there is nothing else to reckon with for a commander.
The thought behind making a rule gets lost, because commanders are compelled to stick to the formal rules. Also, it is not taken into account that there needs to be a balance between the risks to be taken if there are no rules and the extra effort that needs to be punt in to abide by the rules.
A commander needs to weigh all these various aspects, and in abiding by a rule often loses. For example, sometimes I call home from my cell phone given to me as a commander.

In certain situations it is necessary to deliver work fit to measure. Rules do not give sufficient working space, and sometimes I need to find the middle of the road between what is good for a person and what is good for the organization.

To react flexibly on a certain situation, to make a gesture to my client and to improve my own (organizational) policy.

To keep the organization running and trustworthy.

To keep the unit running: train as you fight.

A rule is incompatible with my assignment. Rules are partly unknown, especially there where rules must be applied. Rules lead to an inefficient organizational policy.

Deviation from rules in order to attain my unit's goals. Sometimes even rules are contradictory and I have to weigh the pros and cons of which rules to apply.

I deviate from rules if something must be done for the unit and the RNLA is not harmed by doing it so. I weigh pros and cons.

Rules can not be worked with in operations. I give priority to my unit's assignment.

Rules are always restrictive. If an exercise is planned, the rules must be read first, and even worse, the changes in rules must be looked up.

To attain my goal, maintaining battle readiness.

For operational readiness.

Why do you say some rules do not support you in leading your unit?

A commander has insufficient liberty to weigh the interests of the organization against those of his personnel. Rules are too rigid. Weighing interests should take place more at the decentralist levels.

Many rules as HACCP, legal status of the personnel and financial control cause a lot of bureaucratic work. However, they deliver little for my unit's output.

Some rules are too complex, too much into detail, not transparent.

There is often nothing wrong with civilian rules that need to be followed in the RNLA, but the RNLA often tries to be better than the civilian in abiding by rules. There would be fewer problems if the central staff understood that everyone works according to mission-oriented command, and accepts this.

Rules in my field of work (the National Territory) change all the time, are too complex and are not supported by the superior levels. As a commander, one loses the grip and it is difficult to explain changes to subordinates.

Much about what is and is not allowed has been written down, very often guidelines about exceptions for units on field exercises and in operational circumstances is lacking.

Rules restrict, rather than enable, and the financial means to follow rules are not given on time.

Rules do not support me. Support means help. Rules do not help.

I am restricted because often, necessary means are not given to abide by the rules.

The rules are civil rules, good for Philips but not for the special tasks of the RNLA. We are a military organization, this demands special mentality.

What improvements would you make if you were allowed to set the rules within your organization?

Rules should be clear, not interpretable in different ways. Should this be impossible, make sure that the same set of rules is applicable for units of a similar type. If even this is impossible, enable commanders to adapt rules to the local situation.

Rules should set boundaries, no more than that and not be too detailed.

Simpler, less bureaucratic and more aimed at results. Lay responsibility and authority with those who need to take the decision, especially when personnel and financial processes are concerned.

Company commanders should get a brief instructive working instruction, apart from the formal rules.

I would like to work according to the principles what I need to accomplish and what is the minimum that I need to assign to my people in terms of norms, formalities, authority and procedures.
Finding a specific rule in the jungle of rules takes a lot of time and effort. A good solution would be a good search engine with hyperlinks on the intranet.

A practical translation of rules. Test new regulations on the work floor prior to implementing it. Writing regulations down in such a manner that commanders can read and apply them easily.

My unit and my sub commanders should be able to train, not deal with rules all the time.

Interpret civilian rules and replace them by Defense rules or RNLA rules; first implement the preconditions, then the rules and not the other way around.

A couple of years ago the slogan was: "decentralize, unless…" Because of mainly financial restrictions, this has changed the other way around. Many rules would be improved by "fewer and better" if commanders at the work floor would get more integral responsibilities with a budget related to their tasks.

Rules are complicated. I had one of my men go to Military Court, in service dress, and gave him a military private car, but I was reprimanded for doing that. I asked several military law officers their opinions and they were contradictory!

Rules should be brief, readable, and changes in rules should be transmitted with notification of what has changed. And we should work inter-service.

Simplification of procedures to obtain goods, and mandates lower in the organization.

Train as you fight and work as you fight. Many rules can simply not be worked with.

Loose remarks:

I often have the feeling that incomplete staff work is poured over us as commanders. How orders should be executed is not mentioned, which creates a lot of distress. Commanders need to figure out themselves what needs to be done about new regulations, this costs a lot of time. There are no guidelines for implementation. Often the people at the general staff think that if they give an order today, it has been executed tomorrow, but that is impossible if rules need to be interpreted at the work floor.

The governing model as set in 1992 has not been implemented completely. The bureaucratic model is still in charge.
Economic solutions are often not considered decisive when decision-making is at stake in the RNLA.
At least 50% of the staff capacity in the RNLA is super fluent.
Many reorganizations do not give good results as there is no consensus on the targets.
Everything is important and has priority, especially controllers (financial) subjects.

Apart from my opinion about the superior and subordinate level, I have an opinion about the higher levels, which is a lot less positive than my opinion about the superior level!

Too much paper ends on the desks of the lower level commanders. Those who wrote these papers think everything is set and done this way, but that is a mistake. I feel myself more an administrative worker than a commander.

Apart from all reorganizations, the biggest problem is bureaucracy. The higher level often is not capable of creating the right preconditions for professional completion of the tasks.

Rules are necessary and often clear, but too comprehensive, not translated for practical use and not flexible. The more details are written down, the more difficult rules become to understand, which makes practical use more difficult. The mind of rules is much more important: what do we have in mind with a certain rule, why does the rule exist.

It is difficult to abide by rules under operational circumstances, although I admit that many rules have been made for the benefit of the employee. But sometimes the necessary equipment for following rules has not been given. Centralizing rules is less flexible, whereas many operational units have a short horizon. Often "no" is the answer.
E-mail may seem handy, but often it is thought that if a message has been communicated by mail, that the recipient has read it. Written messages often appear to be explicable in multiple ways. This gives problems.

If someone reports sick but the suspicion is that the person is not sick, no one is able to do something about it. Drug use can only be punished if a person is caught in the act of using. The US Army has a different policy, why do we do not the same?
Higher levels do not have sufficient insight in the consequences of their decisions at the lower levels. I do not trust the higher level sufficiently to go to war with them. There is an extra layer in the organization between the top and the work floor that slows processes and changes down to a speed that is hazardous to the survival of the organization.

Intranet provides regulations for personnel, but not the changes, so I need to check daily if changes have been implemented.
Sometimes situations are not in compliance with regulations but are admitted because a reorganization is upcoming.
Rules take a lot of time to read and understand, whereas my priority is with my personnel.
Rules are necessary, but they do not make everyday work easier.

The RNLA claims it is a company, but it is not. Many commanders do not take their responsibilities. There is no stability in leaders' vision: they switch between superfluous personnel and a shortage of personnel; sometimes we must centralize, then again decentralize; Money is given for the wrong purposes: no ammunition, but lots of money for extra rewards.
(...)

The additional value of staffs is limited. There must come more responsibilities at the lower levels. The bureaucracy is humongous.

There is no money to deal with the most urgent problems, this minimizes the support for regulations among lower level commanders as they do not see improvement. We should be able to switch between budgets, depending on where the money is most needed. There should be a better balance between personnel care and practicability of regulations. Many rules cannot be combined with operational tasks.

I deviate from rules if operational circumstances demand it. New rules are made but old rules still exist. All rules limit my operational process. Rules do not support me, however, they are important for the well being of my personnel. Some rules are too strict, they limit my possibilities.
Rules should be less rigid and practicable. Possibilities should be given to deviate from rules, if legally possible.
My superior staff is very reliable and wants to accomplish the goals together. They are open and honest, and appreciate a positively critical approach.
I have good contact with my subordinate commanders, there is open communication, and they are honest. We are one team.
The last couple of years I notice a policy of "covering myself up" and an unwillingness to express one's opinion. Dishonesty increases, in which one's own career prevails, at the expense of openness. Consequently, those who are critical are often seen as disloyal. The distance between the general staff in The Hague and the work floor seems bigger than ever before! Values and norms are not applied consistently: if someone is wrong, he is wrong, no matter what rank.

Appendix E. Questionnaire for trust in the platoon commander, task-oriented leadership, relation-oriented leadership, experiences with the platoon commander and disposition to trust.

Questionnaire for trust in the platoon commander.

Answering categories were 2 = true; 1 = not true; 0 = I don't know. Items with (-) were negatively formulated and recoded before scaling analyses were performed. Items one through seven formed a scale, the other item was excluded.

1. If the platoon commander compliments me, I wonder if he is serious (-).
2. I assume the platoon commander is honest.
3. If I want to confide in the platoon commander, I am sure he will listen to me.
4. If I tell the platoon commander something, he will not tell it to others in a different way.
5. If the platoon commander promises me something, I am sure that he sticks to it.
6. If the platoon commander knows my weak sides, he will not take advantage of them.
7. If the platoon commander knows I did something wrong, he will not criticize me in front of others.
8. If the platoon commander would laugh about something I do or say, I know he ridicules me.

Questionnaire for task-oriented leadership in the field.

Answering categories were 2 = yes, he will do that; 1 = no, he will not do that; 0 = I don't know. Items with (-) were negatively formulated and recoded before scaling analyses were performed. Items one through four formed a scale, the other items were rejected or excluded.

The field situation was: You are on field exercise with the entire company. It is an important exercise. In the second week everyone gets tired due to bad weather conditions and lots of rain. There is a lot of mud and your platoon is preparing for the next assignment. One of the

drivers should drive his truck to another unit. He is a bit short of time. He tries to drive away, but the vehicle gets stuck in the mud. By trying harder to drive off, the right wheels get stuck toward a hill, and the vehicle is heeling over. As there are a lot of personnel around, it is a dangerous situation. How do you think your platoon commander will react?

1. He gives directions to others
2. He leads the situation and assigns tasks to everyone.
3. He asks the utmost of everyone to get the vehicle out
4. He defines in detail what needs to be done and how to do it.
5. He tries a new way to get the vehicle out.
6. He shows much annoyance if some ways to deal with the problem do not work.
7. He makes everyone hurry to extremes to get the job done (-)
8. He encourages the sergeants to try harder.
9. He asks ideas from sergeants.
10. He lets the sergeants solve the problem (-).
11. He hurries everyone because he does not want to perform worse than the other platoons.
12. He tries to motivate the platoon by saying much needs to be done.
13. He does not involve and leaves the situation to the sergeants (-).
14. From a distance he watches what the sergeants will do (-).

The items in the scale (one through four) were matched with the items submitted to the platoon commander. These items were:

1. I give directions to everyone.
2. I assign tasks to everyone.
3. I ask everyone's participation to get the vehicle out.
4. I define to the finest detail what needs to be done.

Questionnaire for relation-oriented leadership in the barracks.

Answering categories were 2 = yes, he will do that; 1 = no, he will not do that; 0 = I don't know. Items with (-) were negatively formulated and recoded before scaling analyses were performed. Items one through six formed a scale, the other items were rejected or excluded.

The barracks situation was: You have just returned from field exercise with your platoon. This week maintenance of equipment is scheduled. Everyone is busy cleaning and repairing equipment, clothing and weapons. It will be a few weeks before your unit goes on field exercise again. The company commander says the company is not working hard enough and comments on this to his platoon commander. What do you think the platoon commander's reaction toward the platoon will be?

1. He gives a compliment if someone works well.
2. He lets us work extremely hard, more than we can handle (-).
3. Others make suggestions to improve our work, but he wants it done his way (-).
4. If a sergeant makes a mistake he becomes very angry (-).
5. He holds a "pep talk", as morale is important for good results.
6. He discusses a better way to do things with his sergeants.
7. He remains friendly with everyone in the platoon.
8. He blames the sergeants in front of everyone (-).
9. He reassigns tasks without discussing this with anyone (-).
10. If something goes wrong he criticizes the way in which it is done, not the person who does it.

The items in the scale (one through six) were matched with the items submitted to the platoon commander. These items were:

1. I give a compliment if someone works well.
2. I put my people to work really hard (-).
3. I demand that everything is done my way, despite suggestions from others (-).
4. I blame a sergeant if something goes wrong (-).
5. I hold a "pep talk", as morale is important for good results.

6. I discuss with my sergeants ways for improvement.

Questionnaire for experiences with the platoon-commander

Answering categories were 2 = yes, he will do that; 1 = no, he will not do that; 0 = I don't know. Items with (-) were negatively formulated and recoded before scaling analyses were performed. Items one through eight formed a scale, the other items were rejected or excluded.

1. He has rewarded me once for good work.
2. He is interested in my personal situation.
3. He regularly tells us how satisfied he is with our work as a group.
4. He makes sure there is a good team spirit.
5. The platoon's interests come first with him.
6. He works on his own career, at the cost of the platoon (-).
7. Once when I wanted to leave early because my girl friend was ill, he let me take time off for that (-).
8. He looks after safe work procedures for all of us.
9. He has put me on report wrongly.
10. He has let me do much simpler work than my actual job.

Questionnaire for disposition to trust.

Answering categories were 2 = true; 1 = not true; 0 = I don't know. Items with (-) were negatively formulated and recoded before scaling analyses were performed. Items one through three formed a scale, the other items were rejected or excluded.

1. If it comes down to it, nobody cares what happens to you (-).
2. Never trust strangers (-).
3. If you don't watch out, people will take advantage of you (-).
4. It is in people's nature to want to co-operate.
5. If you are in real trouble, someone in your social surroundings will help you.

Curriculum Vitae

Irene Ellen van der Kloet was born in Deventer on August 23rd, 1959. After elementary school she attended grammar school, which she finished in 1978. She joined the Army in September of that year. Highlights in her Army career have been interrogator Russian with the Army Intelligence Corps, personnel officer with a mechanized infantry battalion and company commander in a mechanized infantry battalion. In 1995 the Army allowed her to study sociology in Groningen University, a study she finished in 1999 with a thesis on trust. Subsequently, she started her Ph.D program at Tilburg University. Since 2000 she has been working at the Royal Netherlands Military Academy as an assistant professor.

Stellingen

Behorende bij het proefschrift

A Soldierly Perspective on Trust

A Study into Trust within the Royal Netherlands Army

Irene van der Kloet

Tilburg, 4 februari 2005

1. Vertrouwen schept eenheid (dit proefschrift).

2. Decentralisatie van bevoegdheden aan leidinggevenden binnen een organisatie leidt tot een grotere hoeveelheid regels, met tot gevolg minder beslissingsvrijheid voor diezelfde leidinggevenden (dit proefschrift).

3. Controle is goed, vertrouwen is beter (dit proefschrift).

Algemeen

4. Indien militairen alleen zouden worden beoordeeld op hun capaciteiten, zouden er meer vrouwelijke commandanten in de krijgsmacht zijn.

5. Sommige juristen verdienen een goed belegde boterham aan het vertrouwen dat mensen ten onrechte in elkaar hebben gesteld.

6. De groei van de dienstverlenende sector in Nederland is omgekeerd evenredig met de daadwerkelijk geleverde kwaliteit van de dienstverlening door bedrijven en instanties.

7. Als de Nederlandse regering zichzelf in een volgende kabinetsperiode met 30 % salaris verrijkt, terwijl het volk de buikriem moet aanhalen, is de kans op vertrouwen in de regering minimaal.

8. Uit de interactie tussen mensen en paarden wordt duidelijk dat deskundigheid, voorspelbaarheid, eerlijkheid en welwillendheid de juiste componenten van vertrouwen zijn.

9. Het paard van Troje was een nachtmerrie.

10. Een gegeven paard moet men in de mond kijken, al is het maar om de staat van het gebit vast te stellen.

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